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Water Resources Data, New York
Water Year 1981. Volume 1
Eastern New York Excluding Long Island

(U.S.) Geological Survey
Albany, NY

May 82

U.S. Department of Commerce
National Technical Information Service
NTIS

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# Water Resources Data New York

# Water Year 1981

## Volume 1. Eastern New York excluding Long Island

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NY-81-1
Prepared in cooperation with the State of New York
and with other agencies

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SPRINGFIELD, VA 22161

# CALENDAR FOR WATER YEAR 1981

## 1980

### OCTOBER

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## 1981

### JANUARY

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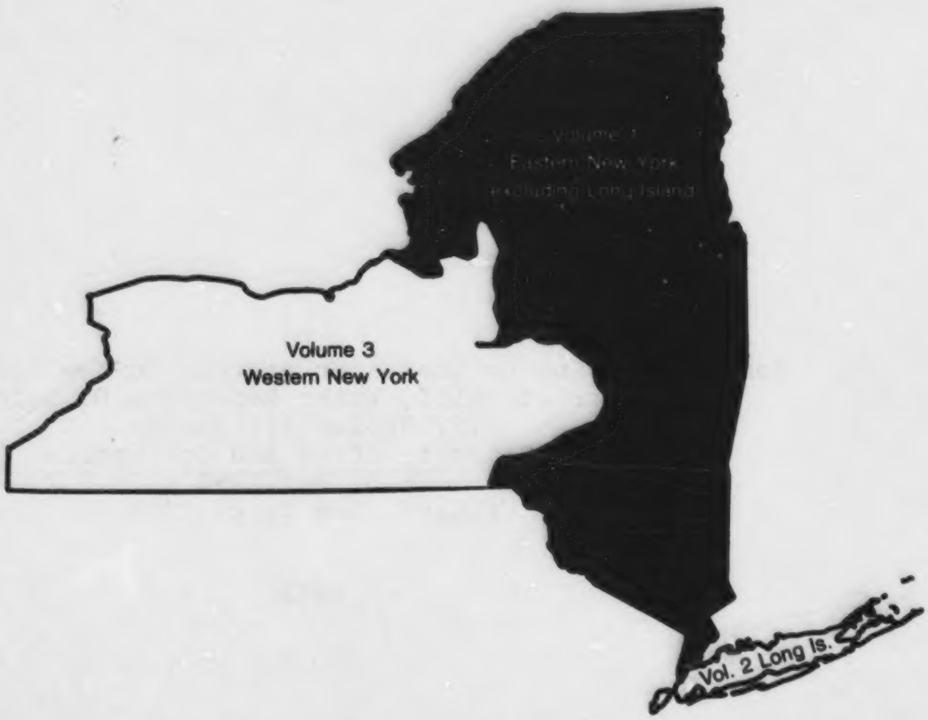
# Water Resources Data
# New York
# Water Year 1981

## Volume 1. Eastern New York excluding Long Island



**U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NY-81-1**
**Prepared in cooperation with the State of New York**
**and with other agencies**

I

UNITED STATES DEPARTMENT OF THE INTERIOR

JAMES G. WATT, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

For information on the water program in New York write to
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U.S. Geological Survey
U.S. Post Office and Courthouse
P.O. Box 1350
Albany, New York 12201

1982

# PREFACE

This report was prepared by personnel of the New York district of the Water Resources Division of the U.S. Geological Survey under the supervision of L. A. Martens, District Chief, and J. E. Biesecker, Regional Hydrologist, Northeastern Region. It was done in cooperation with the State of New York and with other agencies.

This report is one of a series issued by State boundary. General direction for the series is by Philip Cohen, Chief Hydrologist, U.S. Geological Survey, and R. J. Dingman, Assistant Chief Hydrologist for Scientific Publications and Data Management.

Data for New York are in three volumes as follows:

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Volume 2. Long Island
Volume 3. Western New York

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Water resources data for the 1981 water year for New York consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels of ground-water wells. This volume contains records for water discharge at 105 gaging stations; stage only at 6 gaging stations; and stage and contents at 4 gaging stations and 19 other lakes and reservoirs; water quality at 29 gaging stations, 5 precipitation stations and 4 partial-record stations; and water levels at 23 observation wells. Also included are data for 50 crest-stage and 14 low-flow partial-record stations. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. These data together with the data in Volumes 2 and 3 represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State, local, and Federal agencies in New York.

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# WATER RESOURCES DATA FOR NEW YORK, 1981
## Volume 1.--Eastern New York excluding Long Island

## INTRODUCTION

Water resources data for the 1981 water year for New York consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; quality of precipitation; and water levels and water quality of ground-water wells. This volume contains records for water discharge at 105 gaging stations; stage only at 6 gaging stations; and stage and contents at 4 gaging stations, and 19 other lakes and reservoirs; water quality at 29 gaging stations, 5 precipitation stations and 4 partial record stations and water levels at 23 observation wells. Locations of these sites are shown on figures 4A and 4B. Also included are data for 50 crest-stage and 14 low-flow partial-record stations. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. These data together with the data in Volumes 2 and 3 represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State, local, and Federal agencies in New York.

Records of discharge and stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled "Ground Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from the Branch of Distribution, U.S. Geological Survey, 604 South Pickett Street, Alexandria, VA 22304.

For water years 1961 through 1970, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1970 were similarly released in separate reports.

Beginning with the 1971 water year, water data for streamflow, water quality, and ground water are published in official Survey reports on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report NY-81-1." These water-data reports are for sale, in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the district chief at the address given on the back of the title page or by telephone (518) 472-3107.

## COOPERATION

The U.S. Geological Survey and organizations of the State of New York and other agencies have had cooperative agreements for the systematic collection of water records since 1900. Organizations that assisted in collecting data included in Volume 1, water year 1981, through cooperative agreement with the Survey are:

New York State Department of Environmental Conservation
New York State Department of Transportation
County of Dutchess
County of Putnam, Board of Supervisors
County of Rockland, Drainage Agency
County of Ulster, County Legislature
County of Westchester, Department of Public Works
City of Albany, Department of Water and Water Supply
City of New York, Bureau of Water Resources Development
City of New York, Department of Environmental Protection
Village of Nyack
Board of Hudson River-Black River Regulating District
Central New York State Parks Commission
Oswegatchie River-Cranberry Reservoir Commission
Power Authority of the State of New York

Assistance in the form of funds for collecting records at gaging stations published in this report was also given by the U.S. Army Corps of Engineers, the Environmental Protection Agency, and the St. Lawrence Seaway Development Corp.

The following organizations aided in collecting records:

Mamaroneck, Plattsburgh, Rome, Rye, Tarrytown, Lake George and Yonkers; Central Hudson Gas and Electric Corp.; Indian River Co.; New York State Electric and Gas Corp.; Niagara Mohawk Power Corp.; Orange and Rockland Utilities, Inc.; Power Authority of the State of New York; and Spring Valley Water Co.

Organizations that supplied data are acknowledged in station descriptions.

## SUMMARY OF HYDROLOGIC CONDITIONS

The drought that began to threaten southeastern New York in the summer of 1980 continued and spread northward in the fall and winter of the 1981 water year. Precipitation between October and January was below average over all of eastern New York except the St. Lawrence Valley west of the Adirondack Mountains. A brief reversal came in February, when four storms combined to make that month's precipitation well above average throughout eastern New York. Below-average rainfall returned, however, in March, April, and early May 1981.

Several community water systems were adversely affected by the drought in the fall and winter. In February 1981, the New York State Department of Health identified 27 systems, mostly in southeastern New York, where severe water shortages prompted strict conservation measures or searches for alternative sources. Both ground-water and surface-water sources were affected. The New York City reservoir system was one that experienced an alarmingly dwindling supply, and the City reduced withdrawals and imposed restrictions on water use during the late fall and winter.

After the February 1981 rains, the drought was alleviated. Storage in the New York City Reservoir System, which was at only 28 percent of capacity at the beginning of February, increased to 61 percent of capacity by the end of the month. Conservation measures continued for the rest of the year, however.

During the 1981 summer, the northward advance of the drought was halted as a succession of thunder showers over the Adirondack Mountains and surrounding areas brought rainfall to above-average seasonal levels. Aside from storms in May and early July, below-average precipitation prevailed in the south, although the deficiency was not as severe as that of the previous summer.

The year's total precipitation was below average by 4 to 6 inches in the lower Hudson Valley and east-central New York, and the mean discharge of streams in these areas was well below long-term averages. In the southeastern part, the annual runoff at several index stations fell to the lowest levels since the drought of the mid 1960's. In contrast, rainfall over the St. Lawrence Valley and western Great Lakes area exceeded the average by more than 5 inches in 1981, and the mean annual discharge in some basins draining the western and northern slopes of the Adirondack Mountains approached the highest annual average ever recorded.

The 1981 water year was marked by extreme reversals of seasonal hydrologic trends in January, February, March, and late summer (Figs. 2 and 3).

Abnormally low January temperatures and deficient precipitation combined to keep streamflow at base-flow levels throughout January. In the drought-stricken southeastern part of the State, some long-term streamflow stations in the Schoharie Creek and the Delaware and Lower Hudson River basins indicated record low monthly flows for January. Monthly streamflow over all of eastern New York was below normal.

Unseasonably warm and rainy weather in February melted most of the snowpack, and streams rose to flood stage several times during the month. A storm on February 2 initiated the breakup and jamming of river ice, which had thickened to more than 2 feet on some of the large rivers. General flooding from ice jams in most of eastern New York culminated during the storm of February 12 and 13. Particularly hard hit was the city of Port Jervis, on the Delaware River, which suffered one fatality and considerable damage from the highest flood stage recorded in the 78 years of operation of the gaging station there. Although no records of instantaneous peak discharge were exceeded at long-term stations during February, several new high monthly mean flow records were established on streams throughout eastern New York.

Throughout March, the recession from the previous month's floods continued virtually uninterrupted on most streams. Streamflow was sustained near average levels in the north by the gradual melting of the remaining snowpack in the Adirondack Mountains and Tug Hill Plateau. But in the south, where the snowpack had been mostly eliminated by February's rains, streamflow declined sharply, and monthly means for March approached or exceeded record lows at index stations in the Schoharie Creek and the Delaware and Lower Hudson River basins.

While streamflow declined seasonally to below-average levels in southeastern New York in late summer, the opposite trend was observed in northern New York, where new monthly high records for August and September were set at the index station on the West Branch Oswegatchie River near Harrisville. The above-normal flow of this stream and others draining the northern and western Adirondacks was not accompained by any significant stream flooding.

Water-quality data from the eight NASQAN stations and the Hydrologic Benchmark station in eastern upstate New York indicated a few new extremes for the period of record of these stations, but the extremes were not significantly different from their normal range.

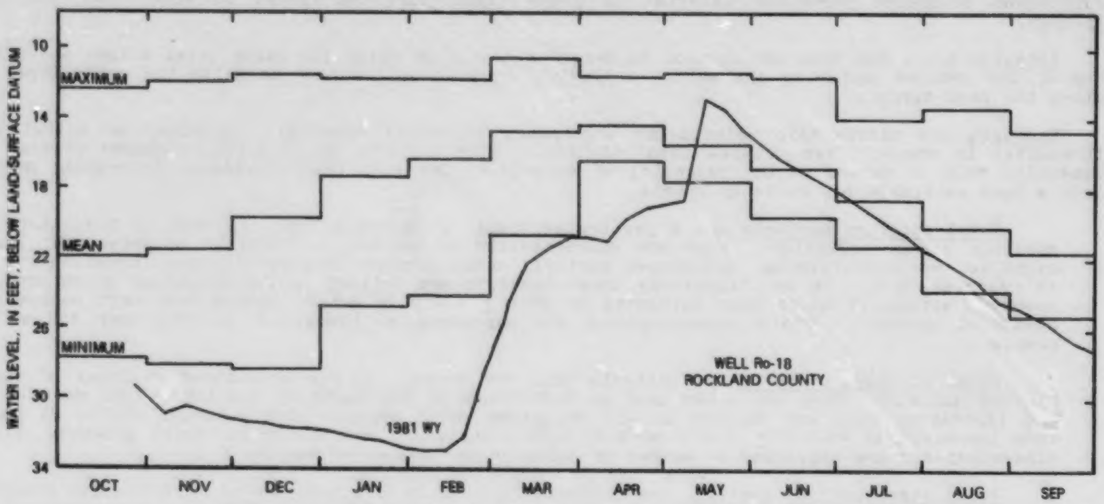
Analyses of bottom sediments from the Saw Mill River indicate that sediments in the lower 3.0 miles of the river are enriched with copper, lead, and zinc compared with upstream sediments. Preliminary data also suggest that downstream bottom sediments are enriched with PCB's. The enriched zones correspond with the areas of greatest urban development in the river basin.

Data from the precipitation-chemistry monitoring network continue to show lowest pH during late summer. Highest sulfate loadings were generally during the early summer. Wet/dry collection at Chazy and Lake George completed their first full year of operation; Delmar was operating for nearly the full year. Preliminary results indicate that wetfall contributes 70-85 percent of the total deposition of sulfate and nitrate, the acid-related anions. Phosphorus, however, is contributed mainly by dryfall.

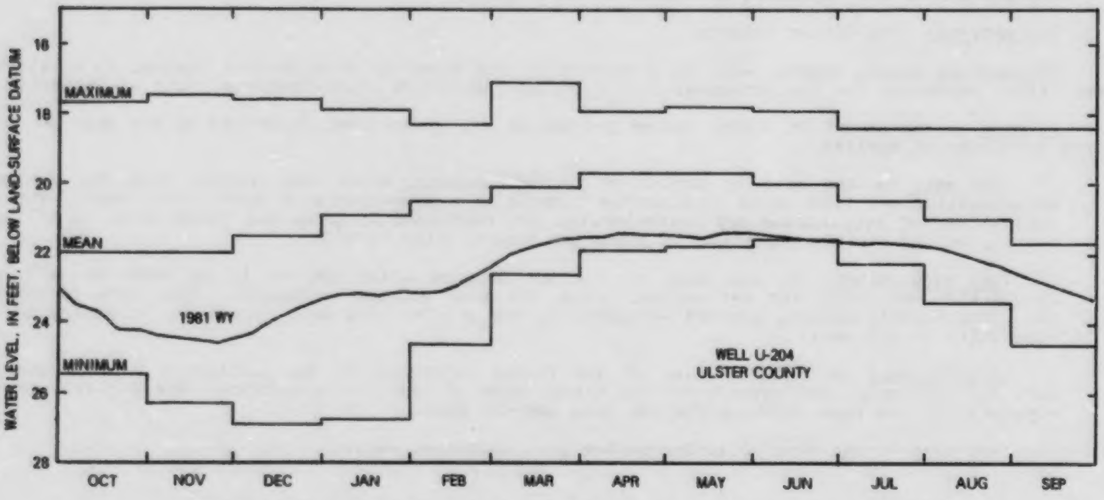
Ground-water levels in eastern New York were generally below average throughout the 1981 water year, increasing a trend from the 1980 water year. Only wells in north and northeastern New York had water levels at or above average. One observation well in bedrock of east central New York, with 29 years of record, recorded a new period of record high. Below-normal precipitation during the winter recharge period, coupled with low soil-moisture content in the summer, resulted in record or near-record low water levels.

Water-level declines were most severe in the southeastern and eastern areas, and upland aquifers, in contrast to valley-floor aquifers, were affected most seriously. February and May rains temporarily reversed the downward trend of water levels in much of the area. By the end of the water year, record and near-record lows were still prevalent in southeastern and eastern New York, but the rest of the area was slowly recovering to normal. In these areas three observation wells recorded a new period of record low, and four had the lowest water level in the last 10 years of record.

The hydrographs below illustrate 1981 water levels versus maximum, minimum, and monthly averages for the period of record in two aquifers in southeastern New York. (A) represents an upland bedrock aquifer in Rockland County; (B) represents a valley-floor till aquifer in Ulster County.



A.--Comparison of 1981 water levels with monthly maximum, mean, and minimum for period 1949-79



B.--Comparison of 1981 water levels with monthly maximum, mean, and minimum for period 1954-79

## DEFINITION OF TERMS

Terms related to streamflow, water quality, and other hydrologic data, as used in this report, are defined below. See also the table for converting inch-pound system units to International System of units (SI) on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as the organisms which produce colonies within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brainheart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 1.0°C on KF medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material See Bottom material.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter ($g/m^3$), and periphyton and benthic organisms in grams per square meter ($g/m^2$).

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and ash mass, and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Biomass pigment ratio is an indicator of the total proportion of periphyton which are autotrophic (plants). This is also called the Autotrophic Index.

Bottom material is the unconsolidated material of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total in bottom material is the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material".

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons or 2,447 cubic meters.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common pigments in plants.

Colloid is any substance with particles in such a fine state of subdivision dispersed in a medium, for example water, that they do not settle out; but not in so fine a state of subdivision that they can be said to be truly dissolved.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second ($FT^3/S$, $ft^3/s$) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment), that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Diversity index is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = -\sum_{i=1}^{s} \frac{n_i}{n} \log_2 \frac{n_i}{n}$$

Where $n_i$ is the number of individuals per taxon, $n$ is the total number of individuals, and $s$ is the total number of taxa in the sample of the community. Diversity index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specific location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the river above the specified point. Figures of drainage area given herein include all closed basins, or noncontribution areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per gram (μg/g) is a unit expressing the concentration of a chemical element as the mass (micrograms) of the element sorbed per unit mass (gram) of sediment.

Micrograms per liter (UG/L, μg/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L, and is based on the mass of sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Organic carbon (OC) is a measure of the organic matter present in aqueous solution and (or) suspension. May be reported in any of three categories (DOC, dissolved organic carbon; SOC, suspended organic carbon; TOC, total organic carbon).

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meters ($m^2$), acres, or hectares. Periphyton benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliters (mL) or liters (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Partial-record station is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle-size is the diameter, in millimeters (mm), of suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in distilled water (chemically dispersed).

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology.

The classification is as follows:

| Classification | Size (mm) | Method of analysis |
|---|---|---|
| Clay.......... | 0.00024 - 0.004 | Sedimentation. |
| Silt.......... | .004 - .062 | Sedimentation. |
| Sand.......... | .062 - 2.0 | Sedimentation or sieve. |
| Gravel........ | 2.0 - 64.0 | Sieve. |

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. The sample is subjected to mechanical and chemical dispersion in distilled water before analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, mass or volume.

Periphyton is the assemblage of algae, fungi, and bacteria which are attached to or live upon submerged objects in lakes and rivers.

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

Picocurie (PCI, pCi) is one trillionth ($1 \times 10^{12}$) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields $3.7 \times 10^{10}$ radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells/mL of sample.

Euglenoids (Euglenophyta) are a group of algae that are usually free-swimming and rarely creeping. They have the ability to grow either photosynthetically in the light or heterotrophically in the dark.

Fire algae (Pyrrhophyta) are free-swimming unicells characterized by a red spot.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells/mL of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Polychlorinated napthalenes (PCNs) are industrial chemicals that are mixtures of chlorinated napthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCBs) and have been identified in commercial PCB preparations.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated by the plants (carbon method).

Milligrams of carbon per area or volume per unit time [mg $C/(m^2.time)$ for periphyton and macrophytes and mg $C/(m^3.time)$] for phytoplankton are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity than the oxygen light and dark bottle method, and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [mg $O_2/(m^2.time)$ for periphyton and macrophytes and mg $O_2/(m^3.time)$] for phytoplankton are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

Runoff in inches (IN., in.) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons/day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or volume, that passes a section in a given time. It is computed by multiplying discharge times mg/L times 0.0027.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in micromhos per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and volume of water per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the work "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lived.

Natural substrates refers to any naturally occurring emersed or submersed solid surface, such as a rock or tree, upon which an organism lived.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multi-plate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection.

Surface area of a lake is that area outlined on the latest U.S.G.S. topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered. All areas shown are those for the stage when the planimetered map was made.

Surficial bed material is that part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of the total concentration in a water-sediment mixture. The water-sediment mixture is associated with (or sorbed on) that material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total".

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata* is the following:

| | |
|---|---|
| Kingdom | Animal |
| Phylum | Arthropoda |
| Class | Insecta |
| Order | Ephemeroptera |
| Family | Ephemeridae |
| Genus | *Hexageria* |
| Species | *Hexagenia limbata* |

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of substance in solution or suspension that passes a stream section during a 24-hour day.

Total load (tons) is the total quantity of any individual constituent, as measured by dry mass or volume, that is dissolved in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge, times the mg/L of the constituent, times the factor 0.0027, times the number of days.

Total (as used in tables of chemical analyses):

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total". (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample.)

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WRD is used as an abbreviation for "Water Resources Data" in the REVISED RECORDS paragraph to refer to State annual basic-data reports published before 1975.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

## DOWNSTREAM ORDER AND STATION NUMBERS

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indention in a list of stations in the front of the report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each hydrologic station, partial-record station, and miscellaneous site has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations, miscellaneous sites, and other stations; therefore, the station number for a partial-record station or a miscellaneous site indicates downstream-order position in a list made up of all types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station such as 01300500 includes the 2-digit part number "01" plus the 6-digit downstream order number "300500". In a few instances where no gaps were left in the 8-digit numbering sequence, one or two digits were added (making a 9- or 10-digit station number) and (or) a latitude-longitude number was used for identification.

## NUMBERING SYSTEM FOR WELLS

The 8-digit downstream order station numbers are not assigned to wells. The well-numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits (assigned sequentially) identify the wells within a 1-second grid. See figure 1 below.

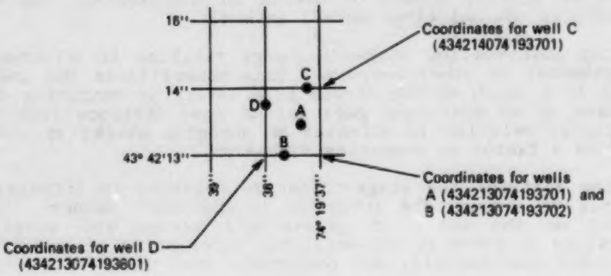

16''
14''
43° 42'13''
39''
38''
74° 19'37''
C
D
A
B
Coordinates for well C (434214074193701)
Coordinates for wells A (434213074193701) and B (434213074193702)
Coordinates for well D (434213074193801)

Figure 1. System for numbering wells (latitude and longitude)

## SPECIAL NETWORKS AND PROGRAMS

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated into the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consulation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality.

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams where potential contamination could result from the application of the commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

## EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

### Collection and Computation of Data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

At some stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of gage-height record and occasional winter discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge are affected by the revision, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The type of gage currently in use; the datum of the present gage referred to National Geodetic Vertical Datum; and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in the section, "DEFINITION OF TERMS."

Information pertaining to the accuracy of the discharge records and to conditions which affect the natural flow of the gaging station is given under "REMARKS." For reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. In addition, the median of yearly mean discharges is given for stream-gaging stations having 10 or more complete years of record if the median differs from the average by more than 10 percent. Under "EXTREMES" are given first, the extremes for the period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with "EXTREMES FOR THE CURRENT YEAR"; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN."). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the drainage area includes large noncontributing areas, or if the average annual rainfall over the drainage basin is usually less than 20 inches. In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharge are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source of indefinite stage-relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also given in special tables following the tables of partial-record stations.

## Accuracy of Field Data and Computed Results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretations of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good," within 10 percent; and "fair," within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 $ft^3/s$; to tenths between 1.0 and 10 $ft^3/s$; to whole numbers between 10 and 1,000 $ft^3/s$; and to 3 significant figures above 1,000 $ft^3/s$. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

### Other Data Available

Information of a more detailed nature than that published for most of the gaging stations such as observations of water temperatures, discharge measurements, gage-height records, and rating tables is on file in the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

## EXPLANATION OF WATER-QUALITY RECORDS

### Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station, where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

### Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites. Data for precipitation-quality stations appear next. The table of ground-water quality data follow the ground-water level records. Data for quality of ground water are listed alphabetically by County, and are identified by well number.

### Descriptive Headings

For continuing record stations, data are preceded by information pertinent to the history of station operation. These descriptive headings give details regarding locations, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Headings for precipitation-quality records include location information and a description of the sample collector.

There is a broad range of water-quality parameters available for most stations whose record exceeds more than a few years operation. Sampling schedules are often intermittant for certain types of data, with analyses available for some but not all years within a stations's period of record. An acurate description of the variety of data available is shown by grouping similar parameters into a few general categories, which are listed in the "PERIOD OF RECORD" paragraph. Each category of data is followed by a notation of the water year(s) for which data is available and a letter code describing the frequency of sampling (see following section, "Frequency-of-Sampling Notation"). Thus, CHEMICAL DATA: 1972-74(c), 1977-81(a).", shows there are at least six analyses each year for the first three years of record, no data for this category in 1975 and 1976, and 1 or 2 samples for each of the five most recent years.

## Categories of Water-Quality Data

The "PERIOD OF RECORD" paragraph lists the following categories of data to describe information available.

CHEMICAL DATA: Usually includes most of the "major ions", and may often include some of the following physical properties: specific conductance, pH, temperature, color, turbidity, dissolved oxygen.

MINOR ELEMENT DATA: Comprises the "heavy metals" and some of the "alkaline earth" groups. Determinations often include some but not all of the following: Al, As, Ba, Cd, Cr, Co, Cu, Hg, Li, Ni, Pb, Se, Sn, Sr, Zn.

RADIOCHEMICAL DATA: The determinations of the concentration of individual radioactive elements, such as radium 226, cobalt 60, strontium 90, and tritium. This category also includes the gross mesurement of radioactivity (alpha, beta, gamma) without regard to the radiochemical species that produce the radioactivity.

PESTICIDE DATA: The organic compounds (insecticides and herbicides) used to control insects and plants. Routinely, the analyses searches for traces of between 12 to 22 compounds.

ORGANIC DATA. Organic data (other than pesticides) such as, OC, PCB, PCN.

NUTRIENT DATA: Constituents containing nitrogen or phosphorus. Results usually include several of the following: nitrate plus nitrate, phosphorus, ammonia nitrogen, organic nitrogen, ammonia nitrogen plus organic nitrogen (Kjeldahl nitrogen).

BIOLOGICAL DATA: The identification and concentration of microscopic plant organisms (phytoplankton, periphyton), or enteric bacteria (total coliform, fecal coliform, or fecal streptococcal) living in aquatic habitats.

SEDIMENT DATA: Suspended-sediment concentration, suspended-sediment discharge, and particle-size data for discrete samples.

## Frequency-of-Sampling Notation

The categories of data given in the "PERIOD OF RECORD" paragraph are followed by the water year(s) for which that kind of data was collected. The amount of data available is specified by the following letter codes:

(a) 1 or 2 samples per year.
(b) 3 to 5 samples per year.
(c) 6 to 9 samples per year.
(d) 10 to 20 samples per year.
(e) more than 20 samples per year.

## Water Analysis

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey Techniques of Water-Resources Investigations listed on a following page.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

Terminology used in reporting chemical constituents is an indication of whether all or only part of a constituent associated with the solids in a water-quality sample is determined by a chemical analysis. (See preceding section, "Definition of Terms.") The "recoverable" in the terms "Suspended, recoverable", "Total, recoverable", and "Recoverable from bottom material" indicates that the constituent was digested by a method that results in the dissolution of only readily soluble substances. Thus, the determination may not represent all of the constituent actually present in the sample. The "total" in the terms "Total", "Suspended, total", and "Total in bottom material" is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the district office.

### Water Temperatures

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures and/or maximum and minimum temperatures for each day are published.

### Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

## EXPLANATION OF GROUND-WATER LEVEL RECORDS

### Collection of Data

Ground-water level data consist of water-level measurements made in observation wells. Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is provided for local needs. See figure 1.

Measurements are made in many types of wells, under varying conditions of access and at different temperatures, hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well; National Geodetic Vertical Datum of 1929 is the datum plane on which the national network of precise levels is based. If known, the altitude of the land-surface datum above National Geodetic Vertical Datum of 1929 is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported as mean daily values, then monthly and yearly means are computed from the daily figures. Water levels in wells not equipped with recording gages are measured periodically, usually weekly, with a weighted tape.

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot.

## PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-four manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 1200 South Eads Street, Arlington, VA 22202 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations".

1-D1. *Water temperature--influential factors, field measurement, and data presentation,* by H. H. Stevens,Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.

1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents,* by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

2-D1. *Application of surface geophysics to ground-water investigations,* by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.

2-E1. *Application of borehole geophysics to water-resources investigations,* by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.

3-A1. *General field and office procedures for indirect discharge measurements,* by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.

3-A2. *Measurement of peak discharge by the slope-area method,* by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.

3-A3. *Measurement of peak discharge at culverts by indirect methods,* by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.

3-A4. *Measurement of peak discharge at width contractions by indirect methods,* by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.

3-A5. *Measurement of peak discharge at dams by indirect methods,* by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.

3-A6. *General procedure for gaging streams,* by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.

3-A7. *Stage measurements at gaging stations,* by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.

3-A8. *Discharge measurements at gaging stations,* by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.

3-A11. *Measurement of discharge by moving-boat method,* by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.

3-B1. *Aquifer-test design, observation, and data analysis,* by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.

3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction,* by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

3-C1. *Fluvial sediment concepts,* by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.

3-C2. *Field methods for measurement of fluvial sediment,* by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.

3-C3. *Computation of fluvial-sediment discharge,* by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.

4-A1. *Some statistical tools in hydrology,* by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.

4-A2. *Frequency curves,* by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.

4-B1. *Low-flow investigations,* by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.

4-B2. *Storage analyses for water supply,* by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.

4-B3. *Regional analyses of streamflow characteristics,* by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.

4-D1. *Computation of rate and volume of stream depletion by wells,* by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.

5-A1. *Methods for determination of inorganic substances in water and fluvial sediments,* by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.

5-A2. *Determination of minor elements in water by emission spectroscopy,* by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.

5-A3. *Methods for analysis of organic substances in water,* by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.

5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples,* edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.

5-A5. *Methods for determination of radioactive substances in water and fluvial sediments,* by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.

5-C1. *Laboratory theory and methods for sediment analysis,* by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.

7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments,* by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.

7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water,* by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.

8-A1. *Methods of measuring water levels in deep wells,* by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.

8-B2. *Calibration and maintenance of vertical-axis type current meters,* by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

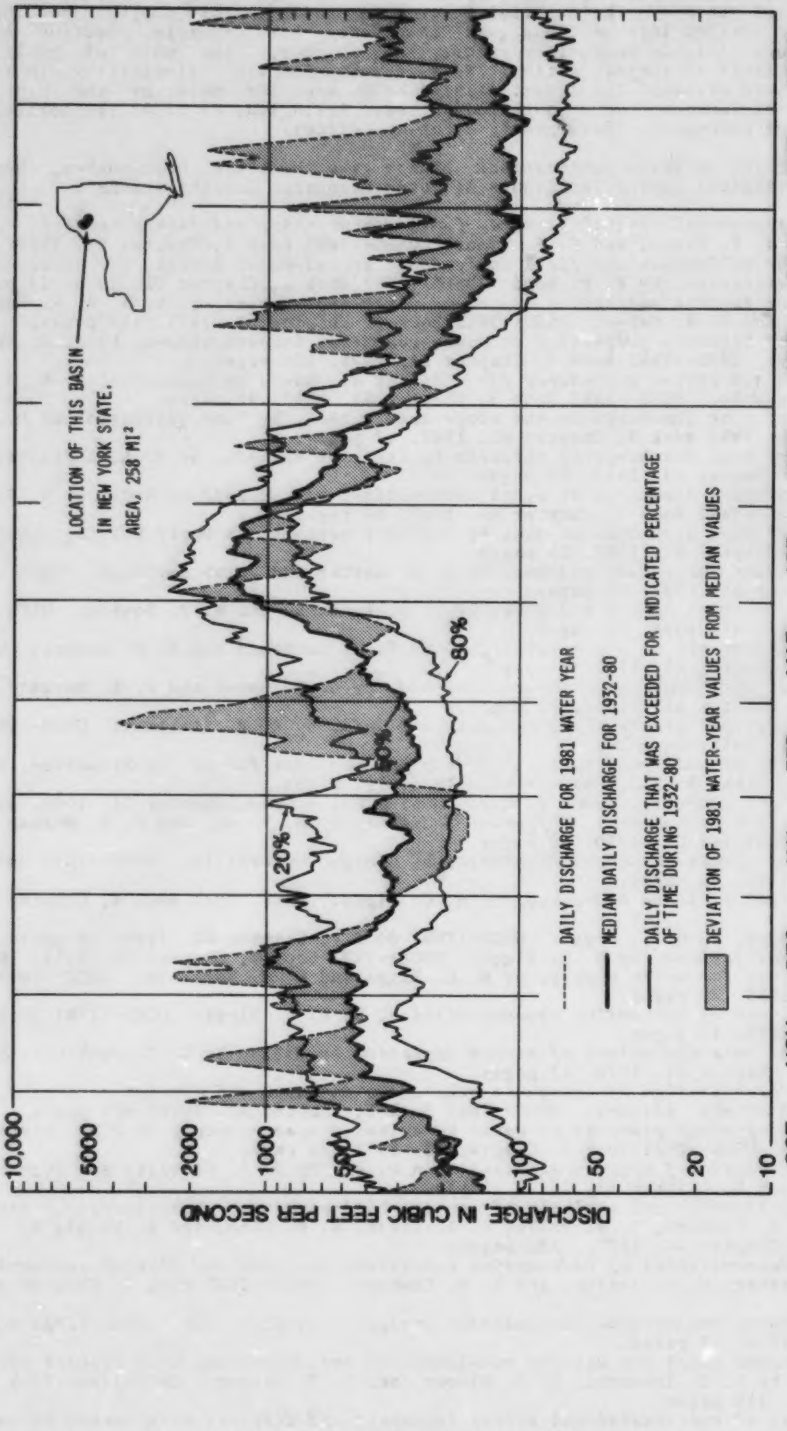


Figure 2.—Hydrographic comparisons, West Branch Oswegatchie River near Harrisville, N.Y.

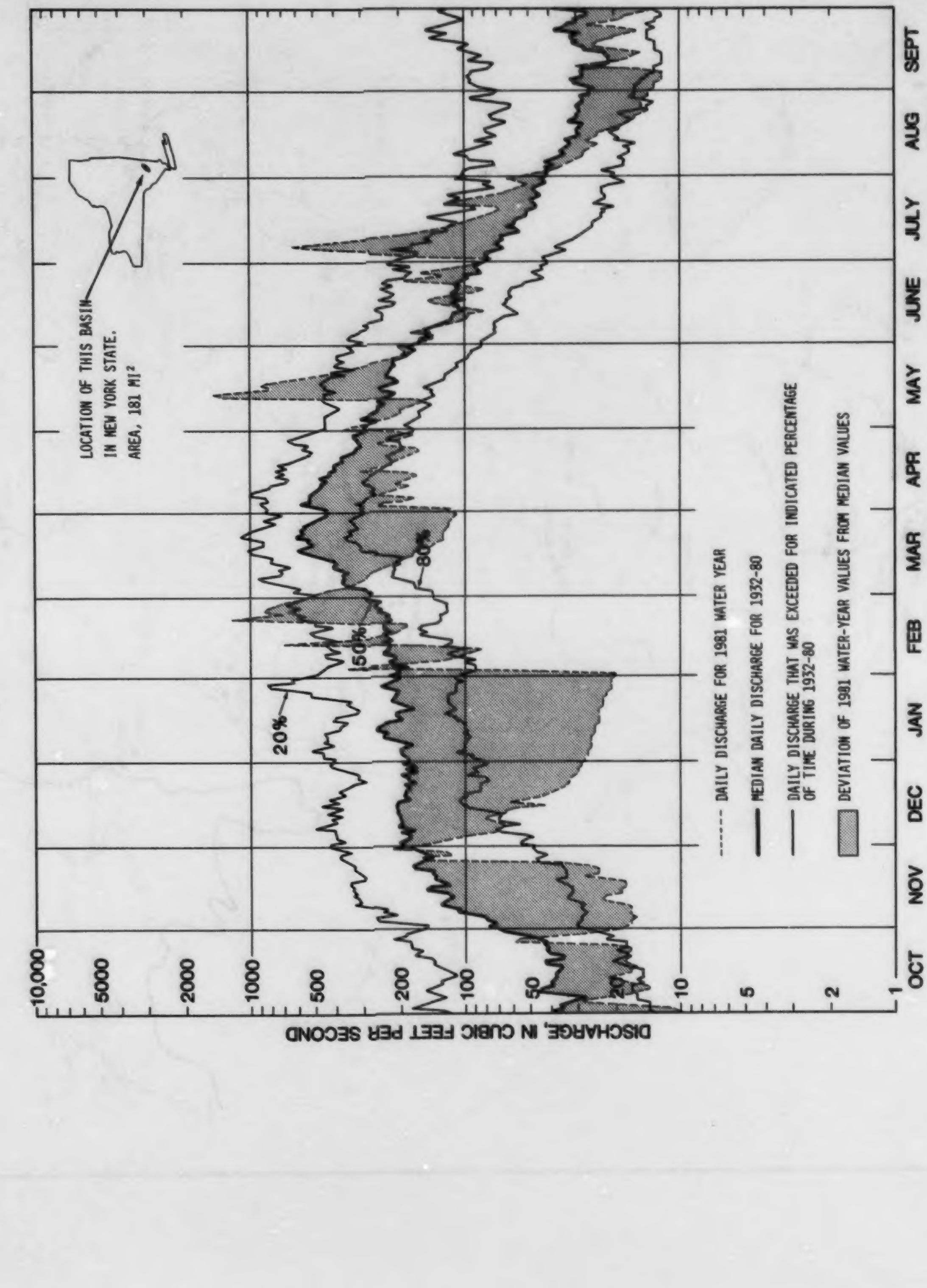
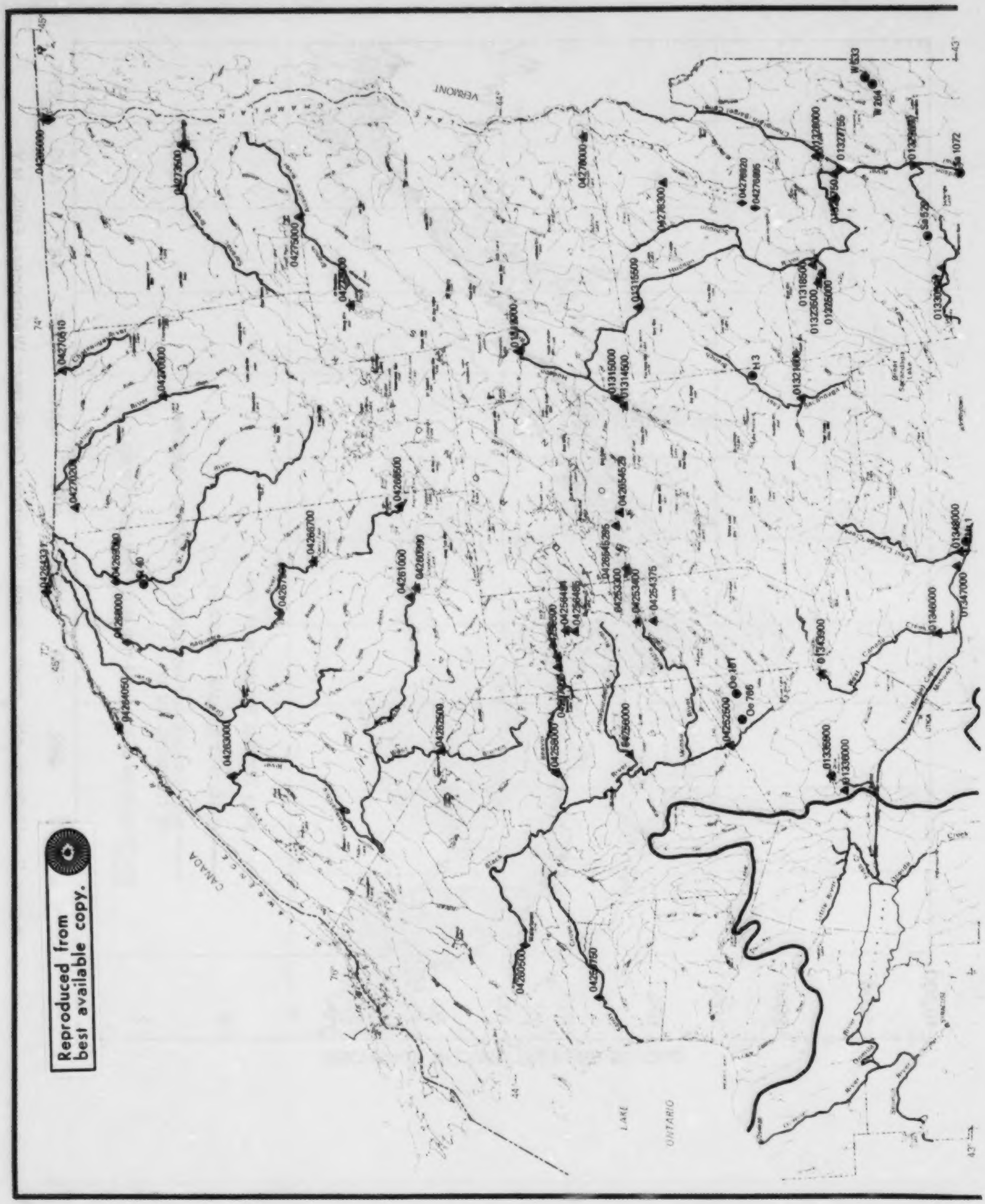


Figure 3.--Hydrographic comparisons, Wappinger Creek near Wappingers Falls, N.Y.



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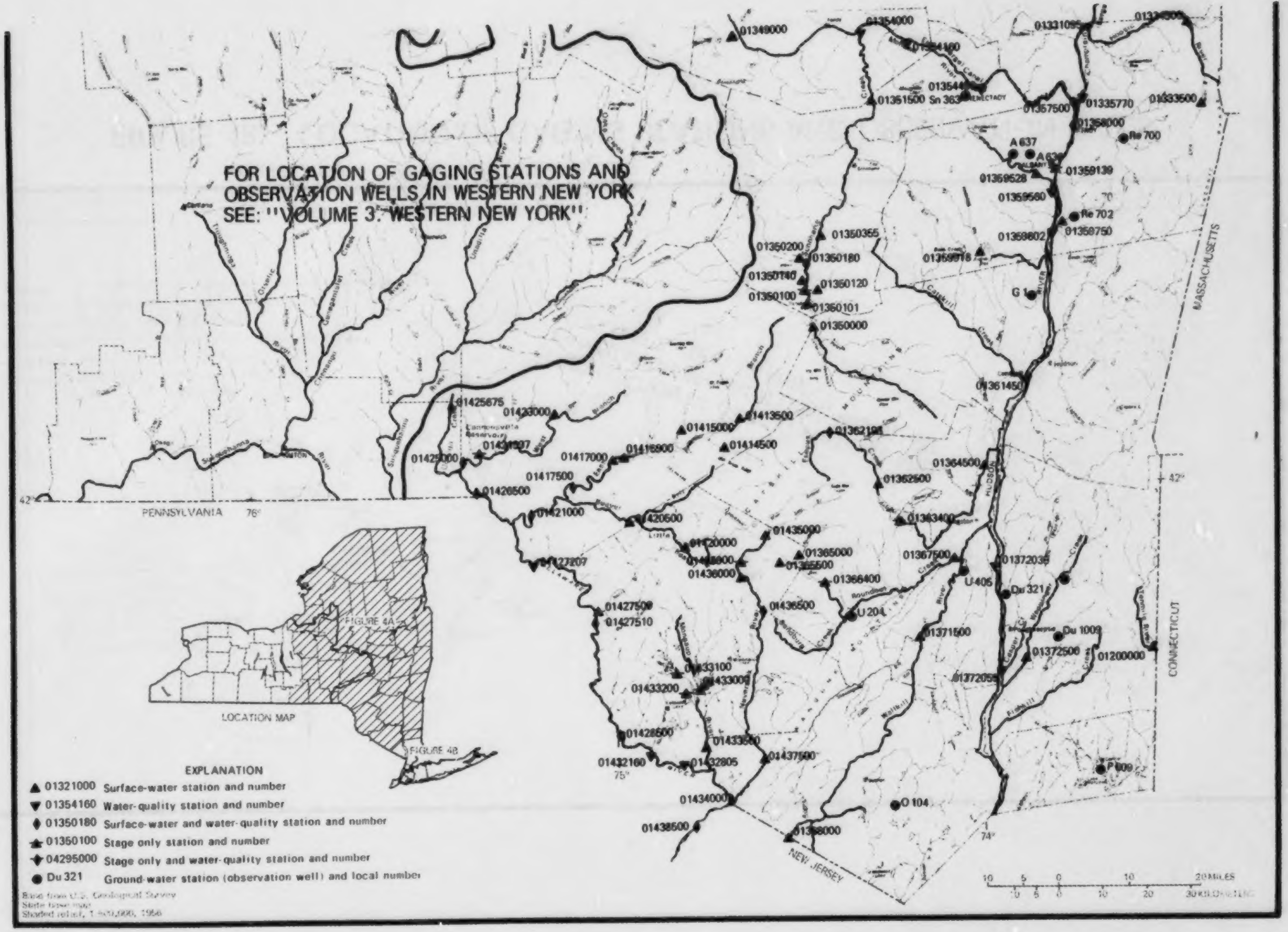
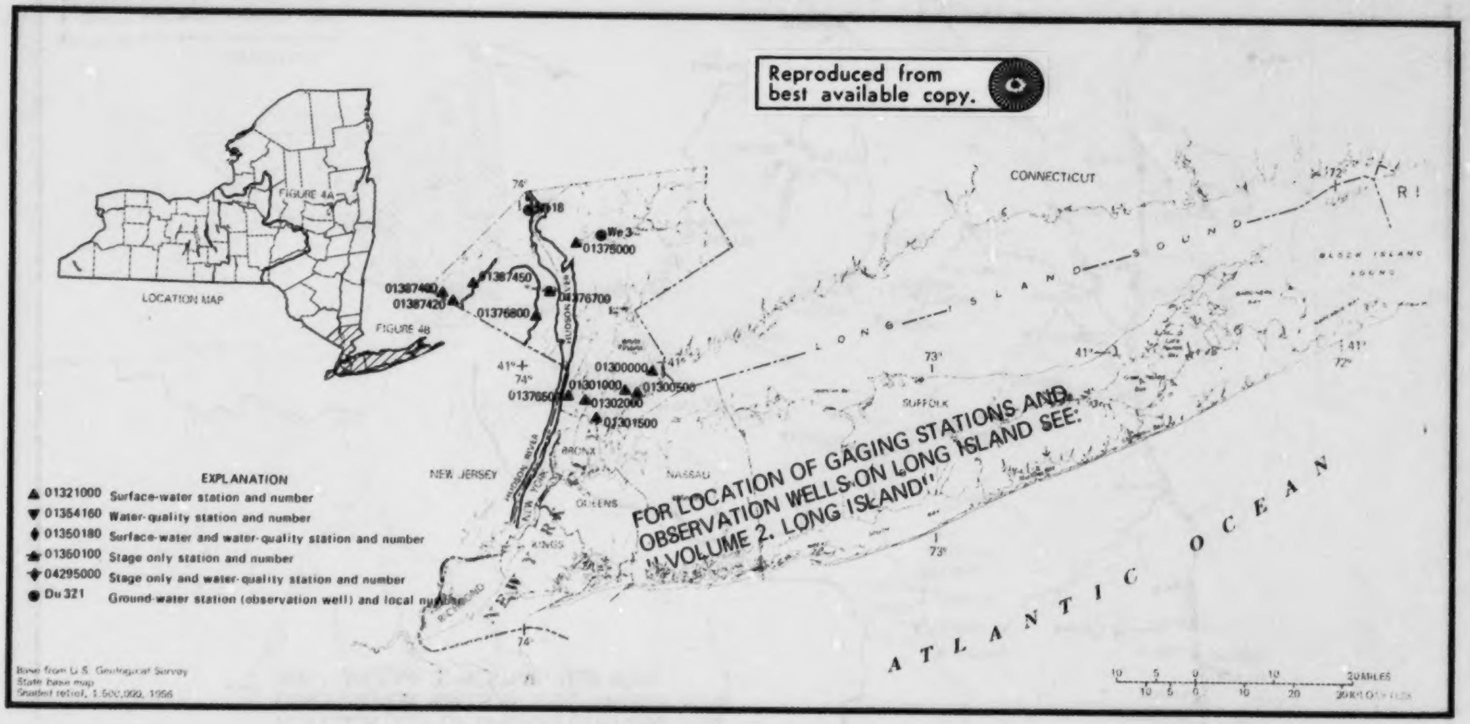


FOR LOCATION OF GAGING STATIONS AND OBSERVATION WELLS IN WESTERN NEW YORK SEE: "VOLUME 3: WESTERN NEW YORK"

FIGURE 4A.-- LOCATION OF GAGING STATIONS AND OBSERVATION WELLS


LOCATION MAP
FIGURE 4A
FIGURE 4B
CONNECTICUT
R I
LONG ISLAND SOUND
BLOCK ISLAND SOUND
NEW JERSEY
HUDSON RIVER
NEW YORK
BRONX
QUEENS
KINGS
RICHMOND
NASSAU
SUFFOLK
ATLANTIC OCEAN
74°
41°
73°
72°
01387400
01387420
01387450
01376800
01376700
01375000
We 3
01376500
01300000
01300500
01301000
01302000
01301500
EXPLANATION
▲ 01321000 Surface-water station and number
▼ 01354160 Water-quality station and number
♦ 01350180 Surface-water and water-quality station and number
01360100 Stage only station and number
04295000 Stage only and water-quality station and number
● Du 321 Ground-water station (observation well) and local number
10 5 0 10 20 MILES
10 5 0 10 20 30 KILOMETERS

FOR LOCATION OF GAGING STATIONS AND OBSERVATION WELLS ON LONG ISLAND SEE: "VOLUME 2. LONG ISLAND"

Base from U.S. Geological Survey
State base map
Shaded relief, 1:500,000, 1956

Reproduced from best available copy.

FIGURE 4B.-- LOCATION OF GAGING STATIONS AND OBSERVATION WELLS

## 01200000 TENMILE RIVER NEAR GAYLORDSVILLE, CT

LOCATION.--Lat 41°39'32", long 73°31'44", Dutchess County, New York, Hydrologic Unit 01100005, on right bank 0.1 mi (0.2 km) downstream from Deuel Hollow Brook, 1.2 mi (1.9 km) upstream from New York-Connecticut State line, 1.7 mi (2.7 km) upstream from mouth, and 2.5 mi (4.0 km) northwest of Gaylordsville.

DRAINAGE AREA.--203 $mi^2$ (526 $km^2$).

PERIOD OF RECORD.--October 1929 to current year. Monthly discharge only for period October to December 1929, published in WSP 1301.

REVISED RECORDS.--WSP 1201: 1939. WSP 1701: 1955-56, 1957(M), 1958-59. WSP 1901: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 304.4 ft (92.78 m), National Geodetic Vertical Datum of 1929, (levels by Connecticut Light and Power Company).

REMARKS.--Records good. Infrequent regulation at low flow. Records of iron, specific conductance, and pH of daily samples for 1958-59 available in district office at Hartford, Connecticut. Chemical analyses available for water years 1959 (WSP 1641), 1968 (WSP 2091), 1973-74 (WRDC 1973-74), 1975 (WDR CT-75-1), 1980 (WDR CT-80-1) and water temperatures available for water year 1959 (WSP 1641).

AVERAGE DISCHARGE.--52 years, 302 $ft^3/s$ (8.553 $m^3/s$), 20.20 in/yr (513 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,400 $ft^3/s$ (493 $m^3/s$) Aug. 19, 1955, gage height, 14.9 ft (4.54 m), from high-water mark, from rating curve extended above 9,800 $ft^3/s$ (278 $m^3/s$); minimum, 5 $ft^3/s$ (0.14 $m^3/s$) Sept. 8, 1957; minimum gage height, 0.52 ft (0.158 m) Sept. 24, 26, 1939; minimum daily discharge, 7 $ft^3/s$ (0.20 $m^3/s$) Oct. 7, 1957.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,400 $ft^3/s$ (39.6 $m^3/s$) and maximum (*):

| Date | Time | Discharge ($ft^3/s$) | Discharge ($m^3/s$) | Gage height (ft) | Gage height (m) | Date | Time | Discharge ($ft^3/s$) | Discharge ($m^3/s$) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 12 | 1200 | *2110 | 59.8 | *5.33 | 1.625 | Feb. 24 | 2300 | 1630 | 46.2 | 4.76 | 1.451 |
| 21 | 0930 | 1960 | 55.5 | 5.17 | 1.576 | May 13 | 0030 | 1990 | 56.4 | 5.20 | 1.585 |

Minimum discharge, 16 $ft^3/s$ (0.45 $m^3/s$) Oct. 1, 2, Sept. 5-7; minimum gage height, 0.62 ft (0.189 m) Oct. 1, 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16 | 54 | 150 | 36 | 32 | 755 | 172 | 353 | 175 | 86 | 54 | 20 |
| 2 | 16 | 41 | 130 | 36 | 250 | 662 | 207 | 300 | 159 | 147 | 49 | 19 |
| 3 | 19 | 38 | 120 | 36 | 563 | 588 | 202 | 277 | 159 | 303 | 44 | 17 |
| 4 | 25 | 36 | 100 | 36 | 262 | 510 | 175 | 246 | 199 | 340 | 41 | 17 |
| 5 | 31 | 36 | 85 | 38 | 177 | 476 | 172 | 230 | 177 | 464 | 39 | 16 |
| 6 | 31 | 34 | 60 | 40 | 143 | 400 | 271 | 223 | 153 | 559 | 37 | 16 |
| 7 | 27 | 35 | 85 | 43 | 138 | 370 | 241 | 220 | 145 | 417 | 34 | 17 |
| 8 | 24 | 35 | 95 | 48 | 139 | 360 | 207 | 202 | 128 | 324 | 38 | 21 |
| 9 | 21 | 37 | 85 | 43 | 207 | 340 | 194 | 189 | 119 | 260 | 34 | 41 |
| 10 | 20 | 42 | 90 | 41 | 187 | 330 | 209 | 182 | 120 | 215 | 33 | 41 |
| 11 | 21 | 43 | 90 | 40 | 635 | 310 | 194 | 207 | 109 | 182 | 33 | 33 |
| 12 | 23 | 40 | 100 | 45 | 1800 | 290 | 184 | 1590 | 99 | 157 | 40 | 28 |
| 13 | 27 | 39 | 85 | 45 | 680 | 280 | 172 | 1480 | 124 | 141 | 45 | 23 |
| 14 | 28 | 38 | 70 | 43 | 461 | 260 | 199 | 941 | 134 | 134 | 39 | 22 |
| 15 | 25 | 35 | 60 | 40 | 373 | 250 | 324 | 810 | 159 | 117 | 36 | 32 |
| 16 | 23 | 34 | 55 | 37 | 306 | 250 | 260 | 964 | 220 | 109 | 43 | 44 |
| 17 | 22 | 34 | 52 | 36 | 291 | 235 | 235 | 830 | 162 | 99 | 39 | 47 |
| 18 | 24 | 39 | 51 | 36 | 291 | 225 | 225 | 657 | 120 | 89 | 33 | 43 |
| 19 | 27 | 38 | 50 | 35 | 282 | 210 | 209 | 546 | 101 | 81 | 29 | 37 |
| 20 | 29 | 42 | 50 | 35 | 882 | 200 | 197 | 476 | 96 | 89 | 27 | 33 |
| 21 | 28 | 42 | 50 | 34 | 1880 | 190 | 184 | 424 | 113 | 126 | 24 | 32 |
| 22 | 27 | 42 | 55 | 34 | 1280 | 180 | 175 | 369 | 122 | 138 | 22 | 28 |
| 23 | 26 | 50 | 60 | 33 | 930 | 170 | 177 | 327 | 192 | 104 | 22 | 26 |
| 24 | 26 | 70 | 50 | 33 | 1460 | 160 | 250 | 294 | 139 | 86 | 21 | 25 |
| 25 | 41 | 110 | 48 | 35 | 1380 | 150 | 262 | 262 | 130 | 78 | 20 | 26 |
| 26 | 89 | 140 | 43 | 43 | 1170 | 170 | 228 | 235 | 179 | 72 | 20 | 25 |
| 27 | 80 | 150 | 40 | 40 | 1120 | 172 | 204 | 215 | 153 | 68 | 19 | 24 |
| 28 | 69 | 140 | 39 | 38 | 882 | 177 | 189 | 207 | 136 | 65 | 25 | 23 |
| 29 | 57 | 150 | 38 | 36 | --- | 166 | 228 | 228 | 111 | 68 | 32 | 20 |
| 30 | 48 | 160 | 37 | 34 | --- | 162 | 446 | 228 | 92 | 68 | 20 | 20 |
| 31 | 44 | --- | 36 | 33 | --- | 182 | --- | 199 | --- | 61 | 21 | --- |
| TOTAL | 1014 | 1824 | 2159 | 1182 | 18201 | 9180 | 6592 | 13911 | 4225 | 5247 | 1013 | 816 |
| MEAN | 32.7 | 60.8 | 69.6 | 38.1 | 650 | 296 | 220 | 449 | 141 | 169 | 32.7 | 27.2 |
| MAX | 89 | 160 | 150 | 48 | 1880 | 755 | 446 | 1590 | 220 | 559 | 54 | 47 |
| MIN | 16 | 34 | 36 | 33 | 32 | 150 | 172 | 182 | 92 | 61 | 19 | 16 |
| CFSM | .16 | .30 | .34 | .19 | 3.20 | 1.46 | 1.08 | 2.21 | .70 | .83 | .16 | .13 |
| IN. | .19 | .33 | .40 | .22 | 3.34 | 1.68 | 1.21 | 2.55 | .77 | .96 | .19 | .15 |

CAL YR 1980 TOTAL 75862 MEAN 207 MAX 3450 MIN 11 CFSM 1.02 IN 13.90
WTR YR 1981 TOTAL 65364 MEAN 179 MAX 1880 MIN 16 CFSM .88 IN 11.98

## 01300000 BLIND BROOK AT RYE, NY

LOCATION.--Lat 40°59'00", long 73°41'14", Westchester County, Hydrologic Unit 02030102, on left bank at Rye, just upstream from bridge on Theodore Fremd Avenue, 0.25 mi (0.40 km) southwest of Penn Central Transportation Co. railroad station, and 0.85 mi (1.37 km) upstream from mean high tide in Milton Harbor.

DRAINAGE AREA.--9.20 $mi^2$ (23.8 $km^2$).

PERIOD OF RECORD.--November 1943 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 13.05 ft (3.978 m) National Geodetic Vertical Datum of 1929 (levels by City of Rye).

REMARKS.--Records fair. Medium and high flows affected by detention reservoir 2 mi (3 km) upstream (capacity, about 26 acre-ft (32,100 $m^3$) at spillway level or 50 acre-ft (61,700 $m^3$) at crest of concrete dam).

AVERAGE DISCHARGE.--37 years, 15.5 $ft^3/s$ (0.439 $m^3/s$), 22.88 in/yr (581 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,320 $ft^3/s$ (65.7 $m^3/s$) June 19, 1972, gage height, 12.44 ft (3.792 m), from floodmark in gage house, from rating curve extended above 800 $ft^3/s$ (22.7 $m^3/s$) on basis of indirect measurement of peak flow; minimum, 0.12 $ft^3/s$ (0.003 $m^3/s$) July 5, 1953, gage height, 0.80 ft (0.244 m), result of temporary regulation.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 274 $ft^3/s$ (7.76 $m^3/s$) Feb. 20, gage height 3.46 ft (1.055 m), no peak above base of 406 $ft^3/s$ (11 $m^3/s$); minimum discharge, 0.50 $ft^3/s$ (0.014 $m^3/s$) part of each day Aug. 21-27; minimum gage height, 0.90 ft (0.274 m), Aug. 27.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .72 | 1.8 | 10 | 3.6 | 2.1 | 17 | 5.8 | 9.2 | 4.7 | 3.7 | 1.2 | 6.3 |
| 2 | 1.4 | 1.6 | 12 | 3.2 | 30 | 14 | 8.3 | 12 | 9.7 | 6.6 | 1.2 | 2.5 |
| 3 | 3.3 | 1.6 | 7.0 | 3.0 | 20 | 13 | 6.5 | 9.3 | 9.2 | 29 | 1.1 | 1.5 |
| 4 | 8.0 | 2.7 | 5.1 | 2.9 | 13 | 12 | 6.8 | 7.6 | 7.2 | 42 | 1.1 | 1.1 |
| 5 | 2.7 | 3.8 | 4.8 | 3.0 | 9.0 | 12 | 9.7 | 7.1 | 5.4 | 76 | .97 | 1.0 |
| 6 | 1.5 | 2.7 | 4.4 | 2.8 | 7.4 | 13 | 28 | 6.8 | 4.4 | 12 | .87 | 1.3 |
| 7 | 1.3 | 2.3 | 4.3 | 3.4 | 6.4 | 13 | 11 | 6.5 | 3.9 | 7.2 | .83 | 1.9 |
| 8 | 1.1 | 2.3 | 4.4 | 3.1 | 6.0 | 14 | 8.4 | 5.7 | 3.5 | 5.1 | .98 | 16 |
| 9 | 1.0 | 3.4 | 4.9 | 3.1 | 5.4 | 12 | 7.9 | 5.1 | 3.0 | 4.0 | 1.0 | 79 |
| 10 | .95 | 4.8 | 7.5 | 2.9 | 4.9 | 11 | 8.5 | 5.2 | 3.2 | 3.3 | 1.1 | 5.6 |
| 11 | 1.3 | 2.4 | 5.3 | 2.9 | 50 | 9.8 | 8.8 | 16 | 2.9 | 2.8 | .97 | 3.3 |
| 12 | 1.3 | 1.6 | 4.4 | 2.7 | 30 | 9.3 | 8.7 | 88 | 2.5 | 2.4 | 1.1 | 2.4 |
| 13 | 1.2 | 1.6 | 4.2 | 2.6 | 16 | 8.7 | 6.9 | 42 | 2.3 | 2.2 | .99 | 2.0 |
| 14 | .99 | 2.1 | 4.0 | 2.4 | 10 | 8.0 | 38 | 15 | 3.1 | 2.0 | .85 | 1.7 |
| 15 | .99 | 1.9 | 3.6 | 2.3 | 8.4 | 7.5 | 32 | 27 | 3.9 | 1.7 | .82 | 3.6 |
| 16 | .93 | 1.8 | 4.1 | 2.2 | 8.0 | 8.2 | 13 | 62 | 3.5 | 1.5 | 4.9 | 20 |
| 17 | .89 | 1.9 | 4.4 | 2.2 | 8.8 | 7.7 | 11 | 24 | 3.0 | 1.4 | 1.8 | 7.3 |
| 18 | 4.4 | 17 | 3.7 | 2.1 | 9.3 | 7.2 | 10 | 15 | 2.3 | 1.4 | .98 | 4.0 |
| 19 | 9.9 | 7.8 | 3.6 | 2.0 | 11 | 7.3 | 8.9 | 12 | 1.9 | 1.4 | .77 | 3.9 |
| 20 | 2.3 | 4.3 | 3.3 | 2.0 | 137 | 7.5 | 8.4 | 11 | 3.4 | 4.3 | .65 | 3.0 |
| 21 | 1.5 | 3.6 | 3.0 | 1.9 | 51 | 6.9 | 7.5 | 9.3 | 9.8 | 27 | .58 | 2.3 |
| 22 | 1.2 | 3.3 | 2.8 | 1.9 | 37 | 6.3 | 7.1 | 8.4 | 5.4 | 5.9 | .55 | 3.6 |
| 23 | 1.2 | 3.0 | 2.8 | 1.9 | 24 | 6.3 | 8.2 | 7.2 | 3.3 | 3.1 | .54 | 6.5 |
| 24 | 1.1 | 15 | 3.2 | 1.8 | 102 | 6.3 | 17 | 6.4 | 2.2 | 2.3 | .55 | 3.0 |
| 25 | 45 | 36 | 3.1 | 1.8 | 27 | 6.3 | 11 | 5.8 | 8.7 | 2.0 | .55 | 2.0 |
| 26 | 18 | 8.4 | 2.7 | 1.8 | 26 | 6.5 | 8.1 | 5.5 | 11 | 1.9 | .56 | 1.8 |
| 27 | 3.9 | 8.3 | 2.6 | 1.7 | 19 | 6.1 | 7.3 | 5.3 | 3.6 | 2.5 | 1.1 | 1.7 |
| 28 | 3.1 | 92 | 2.8 | 1.7 | 17 | 6.1 | 7.1 | 5.5 | 2.5 | 2.0 | 1.1 | 1.6 |
| 29 | 2.7 | 30 | 3.8 | 1.7 | --- | 5.8 | 12 | 11 | 1.9 | 1.7 | .88 | 1.5 |
| 30 | 2.3 | 11 | 5.7 | 1.7 | --- | 7.4 | 13 | 6.9 | 1.7 | 1.6 | .82 | 1.2 |
| 31 | 2.0 | --- | 4.3 | 1.6 | --- | 9.0 | --- | 5.3 | --- | 1.4 | .77 | --- |
| TOTAL | 128.17 | 280.0 | 141.8 | 73.9 | 695.7 | 285.2 | 344.9 | 463.1 | 133.1 | 261.4 | 32.18 | 192.6 |
| MEAN | 4.13 | 9.33 | 4.57 | 2.38 | 24.8 | 9.20 | 11.5 | 14.9 | 4.44 | 8.43 | 1.04 | 6.42 |
| MAX | 45 | 92 | 12 | 3.6 | 137 | 17 | 38 | 88 | 11 | 76 | 4.9 | 79 |
| MIN | .72 | 1.6 | 2.6 | 1.6 | 2.1 | 5.8 | 5.8 | 5.1 | 1.7 | 1.4 | .54 | 1.0 |
| CFSM | .45 | 1.01 | .50 | .26 | 2.70 | 1.00 | 1.25 | 1.62 | .48 | .92 | .11 | .70 |
| IN. | .52 | 1.13 | .57 | .30 | 2.81 | 1.15 | 1.39 | 1.87 | .54 | 1.06 | .13 | .78 |

CAL YR 1980 TOTAL 5138.70 MEAN 14.0 MAX 555 MIN .67 CFSM 1.52 IN 20.78
WTR YR 1981 TOTAL 3032.05 MEAN 8.31 MAX 137 MIN .54 CFSM .90 IN 12.26

## 01300500 BEAVER SWAMP BROOK AT MAMARONECK, NY

LOCATION.--Lat 40°57'21", long 73°43'07", Westchester County, Hydrologic Unit 02030102, on right bank just downstream from bridge on Short Street, in Mamaroneck, 0.2 mi (0.3 km) downstream from Brentwood Brook, and 0.2 mi (0.3 km) upstream from tidal barrier in Guion Creek, Mamaroneck Harbor.

DRAINAGE AREA.--4.71 mi$^2$ (12.2 km$^2$).

PERIOD OF RECORD.--November 1943 to current year. Prior to October 1967, published as "near Harrison."

GAGE.--Water-stage recorder and concrete control. Datum of gage is 24.99 ft (7.617 m) National Geodetic Vertical Datum of 1929. Prior to June 8, 1946, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for winter period which are poor. Flow affected by natural storage in swampy areas above station.

AVERAGE DISCHARGE.--37 years, 6.44 ft$^3$/s (0.182 m$^3$/s), 18.57 in/yr (472 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 288 ft$^3$/s (8.16 m$^3$/s) Jan. 21, 1979, gage height, 4.28 ft (1.305 m); no flow at times during 1944, 1953, 1959, 1964, 1965, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 78 ft$^3$/s (2.21 m$^3$/s) Sept. 8, gage height 1.72 ft (0.524 m), no peak above base of 86 ft$^3$/s (2.44 m$^3$/s); minimum daily discharge, 0.05 ft$^3$/s (0.001 m$^3$/s) Nov. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .20 | .09 | 4.4 | 1.8 | 1.0 | 9.2 | 2.6 | 3.1 | 1.4 | 1.9 | .28 | .78 |
| 2 | .61 | .06 | 3.5 | 1.6 | 11 | 7.1 | 3.4 | 5.1 | 3.8 | 1.2 | .26 | .36 |
| 3 | 1.6 | .06 | 2.8 | 1.4 | 19 | 5.7 | 2.6 | 3.3 | 3.3 | 14 | .26 | .22 |
| 4 | 2.4 | .52 | 2.1 | 1.3 | 15 | 4.8 | 2.5 | 2.7 | 3.1 | 16 | .28 | .17 |
| 5 | .47 | .31 | 1.9 | 1.3 | 3.3 | 5.1 | 5.1 | 2.5 | 2.1 | 24 | .32 | .11 |
| 6 | .30 | .11 | 1.7 | 1.5 | 2.0 | 6.8 | 11 | 2.3 | 1.5 | 8.4 | .24 | .11 |
| 7 | .25 | .11 | 1.7 | 1.8 | 1.7 | 6.4 | 5.4 | 1.9 | 1.2 | 3.6 | .22 | .14 |
| 8 | .26 | .09 | 1.9 | 1.4 | 1.6 | 7.1 | 4.1 | 1.8 | .89 | 2.2 | .30 | 6.4 |
| 9 | .26 | .76 | 2.2 | 1.1 | 1.4 | 6.4 | 3.8 | 1.6 | 2.3 | 1.4 | .29 | 22 |
| 10 | .24 | .49 | 3.3 | .84 | 2.1 | 5.1 | 3.5 | 1.8 | 2.4 | 1.1 | .25 | 3.3 |
| 11 | .43 | .11 | 2.2 | .64 | 14 | 4.5 | 3.8 | 6.8 | 1.8 | .95 | .26 | 1.1 |
| 12 | .29 | .10 | 1.9 | .54 | 15 | 4.0 | 3.6 | 22 | 1.3 | .79 | .36 | .68 |
| 13 | .19 | .09 | 1.8 | .48 | 7.0 | 3.5 | 2.9 | 12 | 1.1 | .63 | .25 | .44 |
| 14 | .18 | .08 | 1.7 | .45 | 4.1 | 3.1 | 11 | 6.4 | 1.4 | .58 | .18 | .32 |
| 15 | .24 | .09 | 1.5 | .40 | 2.9 | 2.9 | 11 | 10 | 3.0 | .51 | .20 | 2.2 |
| 16 | .23 | .06 | 1.9 | .37 | 2.8 | 3.3 | 6.4 | 18 | 1.7 | .46 | 1.1 | 9.5 |
| 17 | .21 | .05 | 1.7 | .34 | 3.0 | 3.6 | 5.1 | 9.2 | 1.1 | .41 | .19 | 3.2 |
| 18 | 1.6 | 4.8 | 1.4 | .32 | 3.1 | 3.2 | 5.6 | 6.1 | .78 | .44 | .14 | 1.7 |
| 19 | 1.1 | 2.6 | 1.4 | .30 | 4.0 | 3.2 | 3.9 | 4.8 | .67 | .53 | .12 | 1.4 |
| 20 | .35 | 1.7 | 1.3 | .28 | 30 | 3.1 | 3.2 | 4.3 | 2.3 | 2.4 | .13 | 1.2 |
| 21 | .28 | 1.3 | 1.3 | .27 | 28 | 2.8 | 2.7 | 3.5 | 1.5 | 6.5 | .12 | .84 |
| 22 | .26 | 1.1 | 1.2 | .25 | 15 | 2.6 | 3.1 | 3.1 | 2.3 | 2.2 | .13 | 2.3 |
| 23 | .31 | .83 | 1.2 | .24 | 12 | 2.5 | 3.8 | 2.5 | 1.0 | 1.2 | .13 | 3.0 |
| 24 | .29 | 4.5 | 1.3 | .23 | 40 | 2.4 | 7.7 | 2.1 | .78 | .78 | .11 | 1.3 |
| 25 | 12 | 13 | 1.2 | .22 | 29 | 2.3 | 4.5 | 1.9 | 4.3 | .58 | .14 | .86 |
| 26 | 7.0 | 5.9 | 1.2 | .21 | 18 | 2.4 | 3.4 | 1.8 | 3.7 | .47 | .11 | .68 |
| 27 | 1.7 | 3.0 | 1.3 | .20 | 11 | 2.2 | 3.0 | 1.5 | 1.3 | .72 | .26 | .53 |
| 28 | .76 | 23 | 1.8 | .20 | 10 | 2.0 | 3.0 | 1.9 | .81 | .46 | .58 | .46 |
| 29 | .34 | 27 | 2.2 | .19 | --- | 2.0 | 4.3 | 5.4 | .55 | .43 | .17 | .34 |
| 30 | .16 | 8.5 | 2.5 | .18 | --- | 3.2 | 3.6 | 2.5 | .45 | .35 | .17 | .26 |
| 31 | .12 | --- | 2.5 | .18 | --- | 3.2 | --- | 1.8 | --- | .30 | .17 | --- |
| TOTAL | 34.63 | 100.41 | 60.0 | 20.53 | 307.0 | 125.7 | 139.6 | 153.7 | 53.83 | 95.49 | 7.72 | 65.90 |
| MEAN | 1.12 | 3.35 | 1.94 | .66 | 11.0 | 4.05 | 4.65 | 4.96 | 1.79 | 3.08 | .25 | 2.20 |
| MAX | 12 | 27 | 4.4 | 1.8 | 40 | 9.2 | 11 | 22 | 4.3 | 24 | 1.1 | 22 |
| MIN | .12 | .05 | 1.2 | .18 | 1.0 | 2.0 | 2.5 | 1.5 | .45 | .30 | .11 | .11 |
| CFSM | .24 | .71 | .41 | .14 | 2.34 | .86 | .99 | 1.05 | .38 | .65 | .05 | .47 |
| IN. | .27 | .79 | .47 | .16 | 2.42 | .99 | 1.10 | 1.21 | .43 | .75 | .06 | .52 |

CAL YR 1980 TOTAL 1924.59 MEAN 5.26 MAX 145 MIN .05 CFSM 1.12 IN 15.20
WTR YR 1981 TOTAL 1164.51 MEAN 3.19 MAX 40 MIN .05 CFSM .68 IN 9.20

## 01301000 MAMARONECK RIVER AT MAMARONECK, NY

LOCATION.--Lat 40°57'14", long 73°44'06", Westchester County, Hydrologic Unit 02030102, on left bank in Mamaroneck, 113 ft (34 m) downstream from bridge on Halstead Avenue, 700 ft (213 m) downstream from Sheldrake River, and 0.3 mi (0.5 km) upstream from mean high tide in Mamaroneck Harbor.

DRAINAGE AREA.--23.4 mi² (60.6 km²).

PERIOD OF RECORD.--November 1943 to July 1953, September 1954 to current year.

REVISED RECORDS.--WSP 1502: 1944(M), 1951(M). WDR NY-76-1; 1972(M), 1973(M), 1974(M), 1975(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 11.46 ft (3.493 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 10, 1954, water-stage recorder at same site at datum 0.41 ft (0.125 m) higher.

REMARKS.--Records fair. Storage in former water-supply reservoir on Mamaroneck River, effect unknown.

AVERAGE DISCHARGE.--35 years (1944-52, 1954-81), 34.6 ft³/s (0.980 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,700 ft³/s (105 m³/s) Sept. 26, 1975, gage height, 10.15 ft (3.094 m), from rating curve extended above 2,000 ft³/s (56.6 m³/s) on basis of indirect measurement of peak flow at 10.15 ft (3.094 m); minimum, 0.06 ft³/s (0.002 m³/s) Sept. 30, 1965; minimum daily, 0.10 ft³/s (0.003 m³/s) Sept. 29, 30, 1965; minimum gage height since Sept. 9, 1954, 0.10 ft (0.030 m) July 21, 22, Aug. 18, 19, 1957, Aug. 14, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Backwater from hurricane wave reached a stage of about 11.5 ft (3.51 m) present datum, Sept. 21, 1938, from information by officials of village of Mamaroneck.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 653 ft³/s (18.5 m³/s) Sept. 9, gage height, 2.93 ft (0.893 m); minimum, 1.7 ft³/s (0.048 m³/s) Aug. 20, gage height, 0.26 ft (0.079 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.8 | 5.2 | 40 | 8.9 | 3.3 | 55 | 14 | 26 | 13 | 10 | 3.9 | 5.4 |
| 2 | 4.5 | 4.9 | 22 | 7.9 | 95 | 43 | 21 | 30 | 25 | 17 | 3.6 | 7.0 |
| 3 | 14 | 4.5 | 20 | 7.4 | 38 | 33 | 15 | 21 | 24 | 94 | 3.6 | 4.4 |
| 4 | 20 | 6.0 | 16 | 7.0 | 22 | 29 | 13 | 17 | 26 | 93 | 5.2 | 3.7 |
| 5 | 6.0 | 11 | 15 | 6.6 | 13 | 32 | 18 | 16 | 16 | 185 | 5.4 | 3.4 |
| 6 | 4.1 | 6.0 | 14 | 6.4 | 11 | 34 | 71 | 15 | 13 | 44 | 5.3 | 3.2 |
| 7 | 3.4 | 7.9 | 14 | 6.0 | 11 | 33 | 32 | 14 | 11 | 29 | 5.4 | 3.4 |
| 8 | 3.4 | 6.9 | 14 | 5.6 | 21 | 37 | 20 | 13 | 9.4 | 22 | 5.8 | 30 |
| 9 | 3.1 | 6.9 | 15 | 5.4 | 27 | 39 | 18 | 12 | 9.4 | 17 | 6.4 | 201 |
| 10 | 3.1 | 15 | 20 | 5.4 | 37 | 38 | 20 | 12 | 9.4 | 8.7 | 5.8 | 30 |
| 11 | 3.8 | 6.9 | 14 | 5.2 | 143 | 27 | 20 | 32 | 8.9 | 7.1 | 4.0 | 18 |
| 12 | 4.5 | 6.0 | 13 | 5.0 | 82 | 26 | 18 | 197 | 8.4 | 6.3 | 3.4 | 7.6 |
| 13 | 3.4 | 5.6 | 12 | 4.9 | 34 | 24 | 15 | 125 | 7.9 | 5.9 | 3.1 | 6.2 |
| 14 | 2.8 | 5.2 | 12 | 4.8 | 27 | 22 | 71 | 73 | 9.4 | 5.4 | 3.0 | 5.6 |
| 15 | 2.8 | 5.2 | 11 | 4.6 | 25 | 20 | 58 | 82 | 12 | 5.3 | 2.7 | 11 |
| 16 | 2.8 | 4.9 | 11 | 4.5 | 22 | 21 | 30 | 139 | 9.4 | 4.5 | 14 | 56 |
| 17 | 3.1 | 4.5 | 12 | 4.4 | 21 | 20 | 26 | 70 | 8.9 | 4.4 | 4.2 | 16 |
| 18 | 11 | 37 | 9.4 | 4.3 | 21 | 18 | 29 | 60 | 7.3 | 4.0 | 2.7 | 10 |
| 19 | 22 | 17 | 9.4 | 4.2 | 24 | 17 | 22 | 50 | 6.8 | 4.5 | 2.4 | 9.2 |
| 20 | 5.2 | 9.9 | 8.4 | 4.1 | 322 | 20 | 20 | 34 | 14 | 13 | 2.3 | 9.4 |
| 21 | 3.8 | 8.9 | 7.9 | 4.0 | 174 | 31 | 19 | 30 | 26 | 69 | 2.1 | 6.9 |
| 22 | 3.4 | 8.4 | 7.4 | 3.9 | 105 | 30 | 17 | 28 | 17 | 11 | 2.2 | 11 |
| 23 | 2.8 | 7.4 | 7.9 | 3.8 | 93 | 24 | 20 | 26 | 9.3 | 6.8 | 2.1 | 26 |
| 24 | 3.1 | 30 | 8.4 | 3.7 | 319 | 15 | 48 | 22 | 7.2 | 5.3 | 2.1 | 8.4 |
| 25 | 101 | 93 | 7.9 | 3.6 | 117 | 25 | 26 | 20 | 37 | 4.7 | 2.0 | 6.8 |
| 26 | 34 | 42 | 8.9 | 3.5 | 99 | 28 | 20 | 19 | 31 | 4.5 | 2.2 | 6.2 |
| 27 | 20 | 14 | 9.4 | 3.5 | 66 | 14 | 19 | 16 | 13 | 7.0 | 3.2 | 5.8 |
| 28 | 32 | 213 | 9.4 | 3.4 | 60 | 13 | 18 | 16 | 10 | 5.4 | 7.5 | 9.1 |
| 29 | 22 | 101 | 9.9 | 3.4 | --- | 12 | 31 | 33 | 7.9 | 5.2 | 4.3 | 14 |
| 30 | 6.9 | 51 | 14 | 3.4 | --- | 15 | 35 | 19 | 6.9 | 4.8 | 3.4 | 5.5 |
| 31 | 6.0 | --- | 9.9 | 3.3 | --- | 22 | --- | 16 | --- | 4.4 | 3.4 | --- |
| TOTAL | 360.8 | 745.2 | 403.2 | 152.1 | 2032.3 | 817 | 804 | 1283 | 414.5 | 708.2 | 126.7 | 540.2 |
| MEAN | 11.6 | 24.8 | 13.0 | 4.91 | 72.6 | 26.4 | 26.8 | 41.4 | 13.8 | 22.8 | 4.09 | 18.0 |
| MAX | 101 | 213 | 40 | 8.9 | 322 | 55 | 71 | 197 | 37 | 185 | 14 | 201 |
| MIN | 2.8 | 4.5 | 7.4 | 3.3 | 3.3 | 12 | 13 | 12 | 6.8 | 4.0 | 2.0 | 3.2 |

CAL YR 1980 TOTAL 13555.8 MEAN 37.0 MAX 1230 MIN 2.4
WTR YR 1981 TOTAL 8387.2 MEAN 23.0 MAX 322 MIN 2.0

## 01301500 HUTCHINSON RIVER AT PELHAM, NY

LOCATION.--Lat 40°54'41", long 73°48'55", Westchester County, Hydrologic Unit 02030102, on right bank in Pelham, just upstream from Penn Central Transportation Co. bridge, 100 ft (30 m) downstream from Pelham Lake, and 1.5 mi (2.4 km) west of New Rochelle.

DRAINAGE AREA.--5.76 $mi^2$ (14.9 $km^2$).

PERIOD OF RECORD.--November 1943 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 12.92 ft (3.938 m) National Geodetic Vertical Datum of 1929 (levels by county of Westchester).

REMARKS.--Records poor. Flow controlled by Pelham Lake and three reservoirs above station.

AVERAGE DISCHARGE.--37 years (1944-81), 6.99 $ft^3/s$ (0.198 $m^3/s$).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 526 $ft^3/s$ (14.9 $m^3/s$) Aug. 28, 1971, gage height, 5.18 ft (1.579 m), from rating curve extended above 200 $ft^3/s$ (5.66 $m^3/s$), maximum gage height, 5.38 ft (1.640 m) Jan. 21, 1979; minimum, 0.01 $ft^3/s$ (<0.001 $m^3/s$) July 27, 1957; minimum daily, 0.02 $ft^3/s$ (0.001 $m^3/s$) Aug. 2-6, 1955, July 26, 27, 1957, Oct. 26-30, 1964; minimum gage height, 1.86 ft (0.567 m) Aug. 2, 5, 1955.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 210 $ft^3/s$ (5.95 $m^3/s$) July 4, gage height, 4.35 ft (1.326 m); minimum, 0.16 $ft^3/s$ (0.005 $m^3/s$) Nov. 22, Aug. 14; minimum gage height, 2.20 ft (0.671 m), Aug. 20.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .41 | .30 | 2.5 | 1.1 | .27 | 5.3 | 4.2 | 4.1 | 3.9 | 4.4 | .67 | 5.3 |
| 2 | .97 | .25 | 1.4 | 1.0 | 14 | 4.5 | 5.6 | 7.1 | 6.7 | 3.4 | .56 | 1.6 |
| 3 | 2.6 | .26 | 1.6 | .85 | 13 | 3.7 | 3.9 | 4.8 | 6.4 | 12 | .51 | .71 |
| 4 | 3.5 | 1.1 | 2.7 | .87 | 5.1 | 3.6 | 2.7 | 3.7 | 6.7 | 41 | .45 | .80 |
| 5 | .65 | 1.1 | 1.2 | .72 | 2.8 | 3.8 | 5.2 | 3.1 | 5.1 | 64 | .39 | 1.0 |
| 6 | .65 | .47 | .66 | .74 | 2.0 | 5.7 | 12 | 3.0 | 4.1 | 15 | .36 | 1.1 |
| 7 | .67 | .66 | .64 | 1.2 | 1.6 | 5.7 | 5.8 | 2.5 | 3.1 | 5.7 | .34 | 1.9 |
| 8 | .63 | .89 | .71 | 1.7 | 3.9 | 5.6 | 3.4 | 2.5 | 2.5 | 3.4 | .58 | 17 |
| 9 | .62 | 1.7 | .85 | 1.2 | 4.4 | 4.8 | 2.7 | 2.1 | 2.3 | 2.3 | .52 | 35 |
| 10 | .56 | 2.1 | 2.3 | .97 | 3.0 | 4.1 | 2.5 | 2.1 | 1.9 | 2.1 | .42 | 12 |
| 11 | 1.0 | 2.2 | 1.7 | .72 | 23 | 4.0 | 2.2 | 7.6 | 1.7 | 2.0 | .32 | 4.5 |
| 12 | .84 | 4.7 | 1.3 | .54 | 23 | 3.5 | 2.3 | 41 | 1.4 | 1.8 | .34 | 2.8 |
| 13 | .50 | 2.8 | 1.2 | .42 | 7.0 | 3.1 | 2.2 | 30 | 1.3 | 1.6 | .34 | 1.3 |
| 14 | .51 | 2.3 | 1.1 | .40 | 4.4 | 3.0 | 11 | 11 | 2.5 | 1.3 | .25 | .76 |
| 15 | .55 | 1.7 | 1.2 | .38 | 3.1 | 3.8 | 14 | 11 | 2.9 | 1.2 | .25 | 3.4 |
| 16 | .60 | 1.4 | 1.7 | .36 | 2.8 | 2.7 | 7.1 | 23 | 1.9 | .99 | 1.8 | 15 |
| 17 | .64 | 1.2 | 1.5 | .35 | 2.5 | 2.5 | 4.6 | 12 | 2.1 | .79 | .57 | 8.8 |
| 18 | 2.8 | 6.4 | 1.2 | .34 | 2.5 | 3.1 | 4.2 | 7.0 | 1.9 | .99 | .64 | 4.7 |
| 19 | 1.9 | 3.7 | 1.0 | .32 | 4.1 | 2.7 | 5.7 | 5.3 | 1.6 | 1.5 | .70 | 3.4 |
| 20 | .49 | 2.5 | .71 | .31 | 53 | 1.8 | 4.7 | 4.4 | 3.2 | 6.0 | .40 | 2.0 |
| 21 | .55 | 1.3 | .66 | .30 | 34 | 2.0 | 3.9 | 3.7 | 3.7 | 8.7 | .36 | 1.2 |
| 22 | .72 | .83 | .59 | .30 | 14 | 2.2 | 3.4 | 3.5 | 6.5 | 3.3 | .44 | 3.0 |
| 23 | .52 | .67 | .78 | .29 | 11 | 2.1 | 3.8 | 3.5 | 3.4 | 3.0 | .44 | 5.9 |
| 24 | .45 | 7.6 | 1.0 | .29 | 39 | 2.0 | 7.9 | 3.5 | 2.9 | 2.4 | .39 | 4.2 |
| 25 | 18 | 16 | 1.0 | .29 | 13 | 2.4 | 6.0 | 3.1 | 5.6 | 1.9 | .59 | 2.9 |
| 26 | 15 | 6.8 | .77 | .28 | 8.9 | 2.3 | 4.3 | 2.9 | 9.3 | 1.4 | .41 | 1.8 |
| 27 | 4.3 | 3.3 | .72 | .28 | 6.3 | 2.6 | 3.3 | 2.8 | 5.1 | 2.4 | .37 | 1.1 |
| 28 | 1.8 | 38 | .77 | .28 | 5.5 | 2.6 | 3.3 | 2.9 | 3.8 | 1.1 | 1.4 | .71 |
| 29 | .87 | 23 | 1.5 | .27 | --- | 2.1 | 4.8 | 11 | 2.7 | 1.1 | .47 | .71 |
| 30 | .54 | 5.6 | 1.8 | .27 | --- | 3.5 | 4.6 | 6.4 | 2.2 | .94 | .36 | .79 |
| 31 | .36 | --- | 1.5 | .27 | --- | 5.1 | --- | 4.4 | --- | .80 | .36 | --- |
| TOTAL | 64.20 | 140.83 | 38.26 | 17.61 | 307.17 | 105.9 | 151.3 | 235.0 | 108.4 | 198.51 | 16.00 | 145.38 |
| MEAN | 2.07 | 4.69 | 1.23 | .57 | 11.0 | 3.42 | 5.04 | 7.58 | 3.61 | 6.40 | .52 | 4.85 |
| MAX | 18 | 38 | 2.7 | 1.7 | 53 | 5.7 | 14 | 41 | 9.3 | 64 | 1.8 | 35 |
| MIN | .36 | .25 | .59 | .27 | .27 | 1.8 | 2.2 | 2.1 | 1.3 | .79 | .25 | .71 |

CAL YR 1980 TOTAL 2226.02 MEAN 6.08 MAX 200 MIN .25
WTR YR 1981 TOTAL 1528.56 MEAN 4.19 MAX 64 MIN .25

## 01302000 BRONX RIVER AT BRONXVILLE, NY

LOCATION.--Lat 40°56'09", long 73°50'10", Westchester County, Hydrologic Unit 02030102, on right bank in Bronxville, just upstream from Penn Central Transportation Co. bridge, and 800 ft (244 m) downstream from Grassy Sprain Brook.

DRAINAGE AREA.--26.5 mi$^2$ (68.6 km$^2$), not including 18.1 mi$^2$ (46.9 km$^2$), from which the entire flow is diverted for municipal water supply and drainage purposes.

PERIOD OF RECORD.--November 1943 to current year.

REVISED RECORDS.--WSP 1382: Drainage area. WRD NY 1971: 1961-67(P), 1968(M), 1970(M). WRD NY 1972: 1969(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 73.74 ft (22.476 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Diversions from 18.1 mi$^2$ (46.9 km$^2$) for municipal water supply and flood control use. Included in these diversions is drainage from 12.8 mi$^2$ (33.2 km$^2$) from Kensico Reservoir for City of New York, 4.58 mi$^2$ (11.9 km$^2$) from Grassy Sprain Reservoir for Yonkers, 0.67 mi$^2$ (1.74 km$^2$) for White Plains, and 0.1 mi$^2$ (0.3 km$^2$) for flood control from outflow from Grassy Sprain Reservoir.

AVERAGE DISCHARGE.--37 years (1944-81), 41.3 ft$^3$/s (1.170 m$^3$/s), 21.16 in/yr (537 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,500 ft$^3$/s (70.8 m$^3$/s) June 19, 1972, gage height, 9.63 ft (2.935 m), from rating curve extended above 1,200 ft$^3$/s (34.0 m$^3$/s) on basis of flow through culvert computation of peak flow; minimum, 1.0 ft$^3$/s (0.028 m$^3$/s) Sept. 10, 1944, gage height, 0.14 ft (0.043 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft$^3$/s (16.99 m$^3$/s):

| Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|
| Sept. 8 | 2315 | 870 | 24.6 | 4.87 | 1.484 |

Minimum discharge, 3.8 ft$^3$/s (0.11 m$^3$/s) Aug. 18, 20, 25, 26, gage height, 0.33 ft (0.101 m).

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.7 | 8.3 | 21 | 11 | 7.2 | 56 | 23 | 25 | 17 | 24 | 7.4 | 23 |
| 2 | 8.3 | 7.9 | 19 | 11 | 129 | 48 | 33 | 44 | 37 | 29 | 7.0 | 11 |
| 3 | 29 | 7.5 | 20 | 10 | 41 | 44 | 20 | 27 | 27 | 112 | 7.0 | 6.2 |
| 4 | 36 | 12 | 15 | 10 | 19 | 41 | 19 | 23 | 24 | 174 | 6.6 | 5.3 |
| 5 | 9.1 | 16 | 14 | 10 | 15 | 43 | 33 | 21 | 19 | 156 | 6.4 | 4.9 |
| 6 | 7.1 | 8.7 | 14 | 10 | 15 | 46 | 78 | 21 | 18 | 32 | 6.0 | 4.7 |
| 7 | 6.7 | 8.7 | 14 | 11 | 14 | 41 | 27 | 20 | 16 | 22 | 5.9 | 6.7 |
| 8 | 7.1 | 8.3 | 14 | 10 | 25 | 41 | 24 | 18 | 15 | 18 | 6.6 | 76 |
| 9 | 6.4 | 15 | 15 | 9.6 | 31 | 37 | 23 | 18 | 15 | 15 | 6.8 | 224 |
| 10 | 6.4 | 22 | 24 | 9.0 | 15 | 35 | 26 | 18 | 15 | 14 | 6.0 | 17 |
| 11 | 8.7 | 7.9 | 15 | 8.6 | 206 | 34 | 27 | 66 | 14 | 13 | 6.3 | 11 |
| 12 | 11 | 6.0 | 13 | 8.6 | 93 | 33 | 24 | 285 | 13 | 12 | 7.1 | 8.0 |
| 13 | 6.4 | 6.7 | 12 | 8.4 | 31 | 30 | 21 | 107 | 13 | 12 | 6.6 | 7.0 |
| 14 | 5.7 | 7.5 | 12 | 8.4 | 26 | 28 | 85 | 48 | 19 | 11 | 6.2 | 6.7 |
| 15 | 5.7 | 7.5 | 12 | 8.2 | 24 | 27 | 56 | 68 | 24 | 10 | 6.1 | 17 |
| 16 | 6.4 | 7.1 | 15 | 8.0 | 22 | 29 | 30 | 114 | 16 | 10 | 30 | 74 |
| 17 | 6.0 | 6.7 | 15 | 8.0 | 22 | 27 | 27 | 52 | 14 | 10 | 7.5 | 19 |
| 18 | 29 | 53 | 12 | 7.8 | 22 | 25 | 33 | 42 | 12 | 9.8 | 5.0 | 12 |
| 19 | 27 | 20 | 12 | 7.8 | 28 | 25 | 25 | 45 | 10 | 13 | 5.0 | 10 |
| 20 | 8.3 | 11 | 11 | 7.8 | 336 | 27 | 23 | 39 | 22 | 43 | 4.7 | 9.6 |
| 21 | 6.4 | 10 | 10 | 7.6 | 141 | 26 | 21 | 37 | 32 | 111 | 4.4 | 7.6 |
| 22 | 6.0 | 9.1 | 10 | 7.6 | 92 | 25 | 21 | 31 | 28 | 23 | 4.7 | 19 |
| 23 | 5.7 | 8.7 | 11 | 7.6 | 76 | 25 | 25 | 30 | 13 | 12 | 4.7 | 33 |
| 24 | 6.0 | 65 | 12 | 7.6 | 259 | 22 | 63 | 24 | 10 | 10 | 6.0 | 9.9 |
| 25 | 176 | 84 | 11 | 7.4 | 87 | 22 | 30 | 23 | 58 | 9.7 | 5.0 | 7.7 |
| 26 | 55 | 20 | 9.6 | 7.4 | 87 | 20 | 22 | 22 | 34 | 9.8 | 4.4 | 7.2 |
| 27 | 16 | 15 | 10 | 7.4 | 65 | 21 | 22 | 21 | 13 | 19 | 5.0 | 6.9 |
| 28 | 14 | 193 | 11 | 7.4 | 61 | 20 | 22 | 22 | 11 | 9.3 | 11 | 6.7 |
| 29 | 11 | 68 | 14 | 7.4 | --- | 18 | 38 | 57 | 10 | 9.6 | 5.7 | 6.1 |
| 30 | 9.1 | 27 | 15 | 7.2 | --- | 29 | 45 | 22 | 9.8 | 7.9 | 5.0 | 5.6 |
| 31 | 8.7 | --- | 12 | 7.2 | --- | 30 | --- | 19 | --- | 7.9 | 5.0 | --- |
| TOTAL | 549.9 | 747.6 | 424.6 | 265.0 | 1989.2 | 975 | 966 | 1409 | 578.8 | 969.0 | 211.1 | 662.8 |
| MEAN | 17.7 | 24.9 | 13.7 | 8.55 | 71.0 | 31.5 | 32.2 | 45.5 | 19.3 | 31.3 | 6.81 | 22.1 |
| MAX | 176 | 193 | 24 | 11 | 336 | 56 | 85 | 285 | 58 | 174 | 30 | 224 |
| MIN | 5.7 | 6.0 | 9.6 | 7.2 | 7.2 | 18 | 19 | 18 | 9.8 | 7.9 | 4.4 | 4.7 |
| CFSM | .67 | .94 | .52 | .32 | 2.68 | 1.19 | 1.22 | 1.72 | .73 | 1.18 | .26 | .83 |
| IN. | .77 | 1.05 | .60 | .37 | 2.79 | 1.37 | 1.36 | 1.98 | .81 | 1.36 | .30 | .93 |

CAL YR 1980 TOTAL 15263.2 MEAN 41.7 MAX 1310 MIN 5.1 CFSM 1.57 IN 21.43
WTR YR 1981 TOTAL 9748.0 MEAN 26.7 MAX 336 MIN 4.4 CFSM 1.01 IN 13.68

## 01312000 HUDSON RIVER NEAR NEWCOMB, NY

LOCATION.--Lat 43°58'00", long 74°07'55", Essex County, Hydrologic Unit 02020001, on right bank 30 ft (9 m) downstream from bridge on State Highway 28N, 0.5 mi (0.8 km) downstream from outlet of Harris Lake, 2 mi (3 km) east of Newcomb, and 4 mi (6 km) upstream from Wolf Creek.

DRAINAGE AREA.--192 mi$^2$ (497 km$^2$).

PERIOD OF RECORD.--September 1925 to current year.

REVISED RECORDS.--WSP 696: 1928(M). WSP 711: 1930(m).

GAGE.--Water-stage recorder. Datum of gage is 1,550.38 ft (472.556 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 6, 1931, nonrecording gage at site 125 ft (38 m) downstream at same datum. Aug. 6, 1931 to Nov. 4, 1960, water-stage recorder on left bank at same site and datum.

REMARKS.--Records fair except those for winter periods, which are poor. Flow slightly regulated by small reservoirs above station.

AVERAGE DISCHARGE.--56 years, 396 ft$^3$/s (11.21 m$^3$/s), 28.01 in/yr (711 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,440 ft$^3$/s (211 m$^3$/s) Jan. 1, 1949, gage height, 11.40 ft (3.475 m); minimum, 11 ft$^3$/s (0.31 m$^3$/s) Sept. 3, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,500 ft$^3$/s (71 m$^3$/s) and maximum (*):

| Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|
| Feb. 22 | 0900 | *3,710 | 105 | *7.50 | 2.286 |

Minimum daily discharge, 79 ft$^3$/s (2.24 m$^3$/s) July 17, 18, 20; minimum gage height 1.15 ft (0.350 m) Jan. 30, 31.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 277 | 340 | 265 | 130 | 80 | 879 | 1610 | 602 | 225 | 242 | 264 | 98 |
| 2 | 240 | 299 | 248 | 130 | 100 | 680 | 1860 | 497 | 215 | 182 | 203 | 98 |
| 3 | 230 | 265 | 322 | 130 | 120 | 547 | 1960 | 437 | 194 | 154 | 168 | 110 |
| 4 | 240 | 240 | 379 | 130 | 110 | 452 | 1550 | 379 | 182 | 142 | 149 | 130 |
| 5 | 293 | 257 | 357 | 130 | 110 | 391 | 1500 | 336 | 194 | 135 | 154 | 130 |
| 6 | 309 | 329 | 340 | 120 | 110 | 340 | 1570 | 326 | 217 | 132 | 266 | 120 |
| 7 | 284 | 368 | 302 | 120 | 120 | 312 | 1230 | 329 | 245 | 126 | 351 | 106 |
| 8 | 251 | 497 | 284 | 120 | 120 | 281 | 810 | 293 | 290 | 115 | 328 | 110 |
| 9 | 222 | 845 | 368 | 120 | 120 | 254 | 611 | 251 | 306 | 103 | 391 | 257 |
| 10 | 196 | 868 | 598 | 110 | 150 | 232 | 624 | 225 | 350 | 93 | 484 | 401 |
| 11 | 180 | 793 | 568 | 110 | 170 | 217 | 624 | 240 | 340 | 87 | 460 | 775 |
| 12 | 173 | 655 | 464 | 110 | 200 | 194 | 655 | 959 | 290 | 83 | 457 | 987 |
| 13 | 169 | 522 | 402 | 100 | 300 | 194 | 620 | 2110 | 260 | 81 | 457 | 820 |
| 14 | 160 | 464 | 347 | 100 | 450 | 182 | 518 | 2040 | 237 | 81 | 393 | 629 |
| 15 | 150 | 406 | 290 | 100 | 450 | 173 | 572 | 1360 | 242 | 80 | 339 | 489 |
| 16 | 144 | 350 | 271 | 110 | 400 | 178 | 563 | 1010 | 257 | 85 | 503 | 410 |
| 17 | 156 | 293 | 251 | 110 | 400 | 162 | 480 | 884 | 281 | 79 | 815 | 331 |
| 18 | 154 | 284 | 232 | 110 | 350 | 158 | 624 | 755 | 333 | 79 | 776 | 296 |
| 19 | 169 | 260 | 220 | 110 | 489 | 154 | 1270 | 620 | 315 | 80 | 600 | 291 |
| 20 | 196 | 240 | 205 | 110 | 686 | 146 | 1170 | 509 | 271 | 79 | 451 | 266 |
| 21 | 198 | 220 | 191 | 110 | 2220 | 138 | 833 | 425 | 248 | 114 | 345 | 232 |
| 22 | 189 | 213 | 184 | 100 | 3630 | 131 | 602 | 361 | 230 | 214 | 271 | 271 |
| 23 | 180 | 194 | 178 | 100 | 3270 | 129 | 489 | 312 | 242 | 235 | 227 | 549 |
| 24 | 167 | 196 | 171 | 96 | 2960 | 128 | 476 | 271 | 312 | 198 | 199 | 1070 |
| 25 | 160 | 235 | 171 | 94 | 2920 | 125 | 530 | 240 | 315 | 168 | 140 | 1330 |
| 26 | 315 | 274 | 171 | 90 | 2450 | 123 | 514 | 222 | 522 | 140 | 120 | 1080 |
| 27 | 670 | 271 | 165 | 84 | 1710 | 137 | 460 | 215 | 827 | 137 | 110 | 801 |
| 28 | 675 | 271 | 158 | 80 | 1160 | 150 | 414 | 222 | 728 | 150 | 100 | 685 |
| 29 | 568 | 284 | 152 | 80 | --- | 171 | 398 | 208 | 501 | 216 | 96 | 626 |
| 30 | 476 | 287 | 146 | 80 | --- | 329 | 598 | 205 | 343 | 357 | 96 | 550 |
| 31 | 391 | --- | 142 | 80 | --- | 1050 | --- | 215 | --- | 351 | 96 | --- |
| TOTAL | 8182 | 11020 | 8542 | 3304 | 25355 | 8737 | 25735 | 17058 | 9512 | 4518 | 9809 | 14048 |
| MEAN | 264 | 367 | 276 | 107 | 906 | 282 | 858 | 550 | 317 | 146 | 316 | 468 |
| MAX | 675 | 868 | 598 | 130 | 3630 | 1050 | 1960 | 2110 | 827 | 357 | 815 | 1330 |
| MIN | 144 | 194 | 142 | 80 | 80 | 123 | 398 | 205 | 182 | 79 | 96 | 98 |
| CFSM | 1.38 | 1.91 | 1.44 | .56 | 4.72 | 1.47 | 4.47 | 2.87 | 1.65 | .76 | 1.65 | 2.44 |
| IN. | 1.59 | 2.14 | 1.66 | .64 | 4.91 | 1.69 | 4.99 | 3.30 | 1.84 | .88 | 1.90 | 2.72 |

CAL YR 1980 TOTAL 120580 MEAN 329 MAX 3020 MIN 52 CFSM 1.71 IN 23.36
WTR YR 1981 TOTAL 145820 MEAN 400 MAX 3630 MIN 79 CFSM 2.08 IN 28.25

## 01314500 INDIAN LAKE NEAR INDIAN LAKE, NY

LOCATION.--Lat 43°45'20", long 74°16'35", Hamilton County, Hydrologic Unit 02020001, at Indian Lake Dam on Indian River, and 2.0 mi (3.2 km) south of village of Indian Lake.

DRAINAGE AREA.--131 mi² (339 km²).

PERIOD OF RECORD.--July 1900 to current year. Prior to October 1956, published as "Indian Lake Reservoir near Indian Lake."

GAGE.--Nonrecording gage read once daily. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by masonry dam, completed in 1898. Usable capacity, about 4,500 mil ft³ (127 hm³) at elevation, 1,651.29 ft or 503.313 m (crest of spillway). Sills of double sluice gates at lowest outlet at elevation 1,615.50 ft (492.404 m). Dead storage unknown. Water is used for power development, for improvement of navigation in lower Hudson River, and to compensate for flow diverted from Hudson River at Glens Falls into Champlain (Barge) Canal.

COOPERATION.--Gage-height record furnished by Indian River Co.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 1,656.71 ft (504.965 m) Mar. 28, 1913, contents, 5,781 mil ft³ (164 hm³); minimum observed, 1,616.81 ft (492.804 m), estimated, Feb. 13, 1948, contents, 199 mil ft³ (5.64 hm³).

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 1,649.47 ft (502.758 m) May 30, 31, contents, 4,325 mil ft³ (122 hm³); minimum observed, 1,636.81 ft (498.900 m) Feb. 11, contents 2,234 mil ft³ (63.3 hm³).

Capacity table, current water year
(elevation, in feet and capacity, in billions of cubic feet)

| | | | |
|---|---|---|---|
| 1,635.0 | 1.958 | 1,643.0 | 3.221 |
| 1,636.0 | 2.110 | 1,648.0 | 4.068 |
| 1,638.0 | 2.417 | 1,653.0 | 5.007 |

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
INSTANTANEOUS OBSERVATIONS AT 0800

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1646.99 | 1647.01 | 1646.25 | 1643.06 | 1637.67 | 1644.34 | 1641.03 | 1646.92 | 1649.46 | 1649.25 | 1649.29 | 1648.96 |
| 2 | 1646.99 | 1647.02 | 1646.18 | 1642.93 | 1637.69 | 1644.26 | 1641.64 | 1646.98 | 1649.44 | 1649.20 | 1649.29 | 1648.91 |
| 3 | 1646.93 | 1647.03 | 1646.21 | 1642.73 | 1637.66 | 1644.13 | 1642.28 | 1647.03 | 1649.44 | 1649.18 | 1649.27 | 1648.96 |
| 4 | 1646.91 | 1647.02 | 1646.23 | 1642.54 | 1637.57 | 1643.97 | 1642.73 | 1647.07 | 1649.42 | 1649.16 | 1649.23 | 1649.01 |
| 5 | 1646.88 | 1647.06 | 1646.17 | 1642.36 | 1637.48 | 1643.81 | 1642.98 | 1647.13 | 1649.40 | 1649.16 | 1649.28 | 1649.05 |
| 6 | 1646.85 | 1647.08 | 1646.07 | 1642.26 | 1637.40 | 1643.64 | 1643.31 | 1647.16 | 1649.40 | 1649.20 | 1649.26 | 1649.03 |
| 7 | 1646.82 | 1647.19 | 1646.03 | 1642.06 | 1637.30 | 1643.44 | 1643.48 | 1647.15 | 1649.35 | 1649.22 | 1649.24 | 1649.05 |
| 8 | 1646.79 | 1647.26 | 1645.91 | 1641.88 | 1637.20 | 1643.25 | 1643.65 | 1647.18 | 1649.35 | 1649.22 | 1649.23 | 1649.06 |
| 9 | 1646.72 | 1647.41 | 1645.97 | 1641.69 | 1637.06 | 1643.06 | 1643.77 | 1647.20 | 1649.38 | 1649.19 | 1649.23 | 1649.08 |
| 10 | 1646.71 | 1647.53 | 1646.05 | 1641.52 | 1636.97 | 1642.89 | 1643.93 | 1647.21 | 1649.39 | 1649.18 | 1649.25 | 1649.08 |
| 11 | 1646.65 | 1647.53 | 1646.08 | 1641.33 | 1636.81 | 1642.68 | 1644.06 | 1647.26 | 1649.34 | 1649.13 | 1649.25 | 1649.11 |
| 12 | 1646.63 | 1647.61 | 1646.08 | 1641.13 | 1637.05 | 1642.48 | 1644.23 | 1647.52 | 1649.30 | 1649.07 | 1649.32 | 1649.12 |
| 13 | 1646.60 | 1647.63 | 1646.07 | 1640.97 | 1637.23 | 1642.30 | 1644.33 | 1648.14 | 1649.30 | 1649.06 | 1649.30 | 1649.12 |
| 14 | 1646.57 | 1647.68 | 1645.98 | 1640.81 | 1637.42 | 1642.10 | 1644.55 | 1648.53 | 1649.29 | 1648.98 | 1649.30 | 1649.09 |
| 15 | 1646.52 | 1647.65 | 1645.91 | 1640.63 | 1637.51 | 1641.86 | 1644.59 | 1648.70 | 1649.36 | 1648.92 | 1649.31 | 1648.96 |
| 16 | 1646.49 | 1647.55 | 1645.89 | 1640.48 | 1637.54 | 1641.67 | 1644.74 | 1648.88 | 1649.38 | 1648.94 | 1649.32 | 1648.81 |
| 17 | 1646.41 | 1647.48 | 1645.66 | 1640.29 | 1637.53 | 1641.43 | 1644.96 | 1649.04 | 1649.40 | 1648.90 | 1649.39 | 1648.64 |
| 18 | 1646.41 | 1647.39 | 1645.49 | 1640.13 | 1637.55 | 1641.34 | 1645.21 | 1649.13 | 1649.41 | 1648.89 | 1649.40 | 1648.59 |
| 19 | 1646.42 | 1647.32 | 1645.38 | 1639.98 | 1637.59 | 1641.22 | 1645.53 | 1649.24 | 1649.42 | 1648.86 | 1649.37 | 1648.46 |
| 20 | 1646.42 | 1647.21 | 1645.11 | 1639.71 | 1637.91 | 1641.08 | 1645.78 | 1649.29 | 1649.42 | 1648.81 | 1649.34 | 1648.36 |
| 21 | 1646.44 | 1647.15 | 1644.95 | 1639.56 | 1639.32 | 1640.98 | 1645.94 | 1649.34 | 1649.39 | 1648.93 | 1649.32 | 1648.16 |
| 22 | 1646.43 | 1646.99 | 1644.80 | 1639.36 | 1640.88 | 1640.88 | 1646.02 | 1649.39 | 1649.38 | 1648.95 | 1649.29 | 1648.05 |
| 23 | 1646.40 | 1646.91 | 1644.68 | 1639.21 | 1641.83 | 1640.78 | 1646.12 | 1649.42 | 1649.42 | 1648.93 | 1649.27 | 1648.22 |
| 24 | 1646.39 | 1646.79 | 1644.51 | 1639.05 | 1642.63 | 1640.67 | 1646.28 | 1649.44 | 1649.35 | 1648.88 | 1649.26 | 1648.26 |
| 25 | 1646.35 | 1646.68 | 1644.31 | 1638.87 | 1643.63 | 1640.57 | 1646.39 | 1649.46 | 1649.33 | 1648.86 | 1649.19 | 1648.21 |
| 26 | 1646.69 | 1646.57 | 1644.19 | 1638.69 | 1644.14 | 1640.42 | 1646.45 | 1649.44 | 1649.33 | 1648.84 | 1649.16 | 1648.07 |
| 27 | 1646.82 | 1646.53 | 1643.89 | 1638.54 | 1644.35 | 1640.35 | 1646.53 | 1649.45 | 1649.33 | 1648.86 | 1649.13 | 1647.91 |
| 28 | 1646.94 | 1646.52 | 1643.73 | 1638.34 | 1644.39 | 1640.27 | 1646.64 | 1649.45 | 1649.33 | 1648.94 | 1649.10 | 1647.75 |
| 29 | 1646.97 | 1646.44 | 1643.57 | 1638.17 | --- | 1640.25 | 1646.74 | 1649.46 | 1649.31 | 1649.09 | 1649.07 | 1647.66 |
| 30 | 1647.01 | 1646.34 | 1643.38 | 1638.03 | --- | 1640.23 | 1646.82 | 1649.47 | 1649.29 | 1649.23 | 1649.03 | 1647.46 |
| 31 | 1647.01 | --- | 1643.22 | 1637.82 | --- | 1640.55 | --- | 1649.47 | --- | 1649.29 | 1649.00 | --- |
| MEAN | 1646.68 | 1647.12 | 1645.29 | 1640.46 | 1638.90 | 1641.96 | 1644.69 | 1648.40 | 1649.37 | 1649.04 | 1649.25 | 1648.61 |
| MAX | 1647.01 | 1647.68 | 1646.25 | 1643.06 | 1644.39 | 1644.34 | 1646.82 | 1649.47 | 1649.46 | 1649.29 | 1649.40 | 1649.12 |
| MIN | 1646.35 | 1646.34 | 1643.22 | 1637.82 | 1636.81 | 1640.23 | 1641.03 | 1646.92 | 1649.29 | 1648.81 | 1649.00 | 1647.46 |
| * | 3.898 | 3.761 | 3.239 | 2.372 | 3.440 | 2.864 | 3.881 | 4.332 | 4.280 | 4.297 | 4.227 | 3.967 |
| ** | 0 | -52.9 | -194.9 | -323.7 | +441.5 | -215.1 | +392.4 | +168.4 | -20.1 | +6.35 | -26.1 | -100.3 |

CAL YR 1980 MEAN 1645.77 MAX 1650.03 MIN 1634.99 ** -17.6
WTR YR 1981 MEAN 1645.85 MAX 1649.47 MIN 1636.81 ** 2.19

* Contents, in billons of cubic feet, at 2400 hours on last day of month, by interpolation.
** Change in contents, equivalent in cubic feet per second.

## 01315000 INDIAN RIVER NEAR INDIAN LAKE, NY

LOCATION.--Lat 43°45'30", long 74°16'05", Hamilton County, Hydrologic Unit 02020001, on right bank 0.8 mi (1.3 km) downstream from Indian Lake Dam, 1.0 mi (1.6 km) upstream from Big Brook, and 2.0 mi (3.2 km) south of village of Indian Lake.

DRAINAGE AREA.--132 mi$^2$ (342 km$^2$).

PERIOD OF RECORD.--July 1912 to June 1914, June 1915 to current year. Monthly discharge only for some periods published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 1,604.23 ft (488.969 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 30, 1916, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow regulated by Indian Lake (see station 01314500).

AVERAGE DISCHARGE.--67 years (1913, 1916-81), 295 ft$^3$/s (8.354 m$^3$/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,460 ft$^3$/s (98.0 m$^3$/s) Mar. 28, 1913, gage height, 7.8 ft (2.38 m); minimum, less than 1 ft$^3$/s (0.028 m$^3$/s) frequently, when entire flow of river is being stored in Indian Lake.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 685 ft$^3$/s (19.4 m$^3$/s) Sept. 27, gage height, 3.31 ft (1.01 m); minimum, 19 ft$^3$/s (0.54 m$^3$/s) Sept. 11, gage height, 0.62 ft (0.189 m), minimum daily, 83 ft$^3$/sec (2.35 m/sec), Mar. 31, Apr. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 164 | 126 | 337 | 417 | 352 | 565 | 83 | 91 | 101 | 101 | 98 | 98 |
| 2 | 104 | 126 | 337 | 414 | 352 | 565 | 88 | 91 | 101 | 101 | 98 | 98 |
| 3 | 104 | 126 | 340 | 414 | 352 | 565 | 86 | 91 | 99 | 101 | 98 | 96 |
| 4 | 104 | 126 | 340 | 410 | 352 | 557 | 86 | 93 | 99 | 101 | 98 | 94 |
| 5 | 104 | 126 | 337 | 400 | 352 | 553 | 88 | 93 | 99 | 101 | 98 | 94 |
| 6 | 104 | 126 | 337 | 400 | 352 | 553 | 88 | 93 | 99 | 101 | 98 | 94 |
| 7 | 104 | 126 | 337 | 400 | 352 | 549 | 88 | 91 | 99 | 101 | 98 | 94 |
| 8 | 104 | 128 | 337 | 400 | 352 | 549 | 88 | 91 | 99 | 101 | 99 | 107 |
| 9 | 104 | 128 | 337 | 400 | 349 | 545 | 89 | 93 | 99 | 101 | 98 | 190 |
| 10 | 104 | 164 | 337 | 400 | 349 | 541 | 88 | 93 | 99 | 101 | 98 | 190 |
| 11 | 104 | 183 | 337 | 400 | 349 | 537 | 89 | 96 | 99 | 101 | 98 | 146 |
| 12 | 104 | 183 | 340 | 390 | 346 | 541 | 89 | 130 | 99 | 101 | 99 | 240 |
| 13 | 102 | 183 | 387 | 390 | 346 | 537 | 88 | 188 | 99 | 101 | 99 | 208 |
| 14 | 102 | 183 | 441 | 390 | 346 | 537 | 88 | 186 | 99 | 101 | 99 | 293 |
| 15 | 104 | 253 | 441 | 390 | 346 | 534 | 86 | 186 | 101 | 104 | 99 | 384 |
| 16 | 104 | 304 | 441 | 380 | 346 | 530 | 86 | 186 | 101 | 101 | 99 | 384 |
| 17 | 104 | 304 | 438 | 380 | 346 | 473 | 88 | 183 | 101 | 99 | 99 | 384 |
| 18 | 105 | 304 | 438 | 380 | 343 | 299 | 89 | 181 | 101 | 99 | 99 | 384 |
| 19 | 104 | 304 | 438 | 380 | 346 | 299 | 88 | 170 | 101 | 99 | 104 | 384 |
| 20 | 104 | 304 | 434 | 380 | 361 | 299 | 88 | 101 | 102 | 101 | 99 | 407 |
| 21 | 104 | 319 | 434 | 370 | 371 | 299 | 86 | 101 | 102 | 101 | 101 | 455 |
| 22 | 104 | 340 | 434 | 370 | 381 | 299 | 88 | 101 | 102 | 101 | 101 | 431 |
| 23 | 104 | 340 | 431 | 370 | 414 | 296 | 86 | 101 | 102 | 99 | 101 | 606 |
| 24 | 108 | 343 | 431 | 370 | 484 | 295 | 96 | 102 | 102 | 99 | 105 | 669 |
| 25 | 128 | 343 | 427 | 370 | 503 | 295 | 123 | 102 | 102 | 99 | 99 | 669 |
| 26 | 128 | 340 | 427 | 360 | 549 | 290 | 123 | 102 | 102 | 99 | 99 | 673 |
| 27 | 126 | 340 | 424 | 360 | 553 | 290 | 102 | 102 | 102 | 99 | 98 | 669 |
| 28 | 126 | 340 | 424 | 360 | 565 | 290 | 93 | 102 | 102 | 101 | 98 | 661 |
| 29 | 126 | 340 | 421 | 365 | --- | 290 | 93 | 102 | 102 | 101 | 98 | 653 |
| 30 | 126 | 340 | 421 | 355 | --- | 242 | 91 | 102 | 102 | 99 | 98 | 641 |
| 31 | 126 | --- | 417 | 352 | --- | 83 | --- | 102 | --- | 99 | 98 | --- |
| TOTAL | 3443 | 7192 | 12202 | 11917 | 10809 | 13097 | 2732 | 3646 | 3017 | 3114 | 3071 | 10496 |
| MEAN | 111 | 240 | 394 | 384 | 386 | 422 | 91.1 | 118 | 101 | 100 | 99.1 | 350 |
| MAX | 164 | 343 | 441 | 417 | 565 | 565 | 123 | 188 | 102 | 104 | 105 | 673 |
| MIN | 102 | 126 | 337 | 352 | 343 | 83 | 83 | 91 | 99 | 99 | 98 | 94 |

CAL YR 1980 TOTAL 86656 MEAN 237 MAX 583 MIN 20
WTR YR 1981 TOTAL 84736 MEAN 232 MAX 673 MIN 83

## 01315500 HUDSON RIVER AT NORTH CREEK, NY

LOCATION.--Lat 43°42'03", long 73°59'02", Warren County, Hydrologic Unit 02020001, on left bank 125 ft (38 m) upstream from bridge on State Highway 28N in village of North Creek, 500 ft (152 m) upstream from North Creek, and 26 mi (42 km) downstream from Indian Lake.

DRAINAGE AREA.--792 mi$^2$ (2,051 km$^2$).

PERIOD OF RECORD.--September 1907 to current year.

REVISED RECORDS.--WSP 621: Drainage area. WSP 1432: 1908-18, 1920, 1922. WDR NY-78-1: 1977.

GAGE.--Water-stage recorder. Datum of gage is 987.51 ft (300.993 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 15, 1930, nonrecording gages at sites 80 ft (24 m) and 125 ft (38 m) downstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Appreciable regulation by Indian Lake (see station 01314500) and other reservoirs above station.

AVERAGE DISCHARGE.--74 years, 1,556 ft$^3$/s (44.07 m$^3$/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,900 ft$^3$/s (818 m$^3$/s) Dec. 31, 1948, gage height, 12.14 ft (3.700 m); minimum, 112 ft$^3$/s (3.17 m$^3$/s) July 26, 1934, gage height, 1.96 ft (0.597 m); minimum daily, 114 ft$^3$/s (3.23 m$^3$/s) July 26, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,100 ft$^3$/s (428 m$^3$/s) Feb. 21, gage height, 9.45 ft (2.880 m); maximum gage height, 11.86 ft (2.880 m): minimum, 283 ft$^3$/s (8.01 m$^3$/s) July 19, gage height 2.39 ft (0.728 m); minimum daily, 287 ft$^3$/s (8.13 m$^3$/s), July 18, 19.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 660 | 1070 | 1270 | 740 | 620 | 3140 | 4010 | 1440 | 679 | 589 | 777 | 366 |
| 2 | 580 | 992 | 1210 | 700 | 680 | 2640 | 5450 | 1410 | 589 | 513 | 610 | 366 |
| 3 | 540 | 896 | 1750 | 680 | 720 | 2240 | 5030 | 1400 | 571 | 470 | 510 | 408 |
| 4 | 560 | 822 | 1750 | 660 | 680 | 1900 | 4010 | 1170 | 553 | 454 | 460 | 470 |
| 5 | 620 | 862 | 1400 | 640 | 620 | 1860 | 3580 | 959 | 553 | 465 | 450 | 481 |
| 6 | 640 | 1120 | 1300 | 640 | 700 | 1650 | 3500 | 893 | 553 | 508 | 520 | 444 |
| 7 | 620 | 1170 | 1200 | 620 | 760 | 1550 | 3010 | 893 | 589 | 524 | 650 | 413 |
| 8 | 580 | 1730 | 1200 | 600 | 800 | 1460 | 2250 | 853 | 601 | 486 | 660 | 404 |
| 9 | 520 | 2630 | 1750 | 580 | 820 | 1380 | 1940 | 822 | 645 | 418 | 930 | 755 |
| 10 | 490 | 2400 | 2310 | 580 | 820 | 1330 | 1920 | 784 | 770 | 385 | 960 | 1090 |
| 11 | 450 | 2190 | 2060 | 580 | 820 | 1280 | 1900 | 713 | 755 | 344 | 940 | 1530 |
| 12 | 440 | 1770 | 1600 | 580 | 1000 | 1240 | 1870 | 1370 | 672 | 323 | 1010 | 2030 |
| 13 | 430 | 1430 | 1400 | 580 | 1800 | 1210 | 1780 | 5230 | 614 | 306 | 1010 | 1860 |
| 14 | 420 | 1370 | 1200 | 600 | 2100 | 1160 | 1600 | 5950 | 571 | 295 | 930 | 1550 |
| 15 | 400 | 1290 | 1100 | 600 | 2100 | 1130 | 1510 | 4220 | 679 | 302 | 840 | 1520 |
| 16 | 390 | 1310 | 1100 | 600 | 1800 | 1160 | 1600 | 3180 | 792 | 295 | 1300 | 1340 |
| 17 | 410 | 1160 | 1000 | 600 | 1600 | 1100 | 1450 | 2850 | 799 | 291 | 1600 | 1140 |
| 18 | 463 | 1210 | 1000 | 600 | 2500 | 968 | 1710 | 2520 | 784 | 287 | 1470 | 1130 |
| 19 | 514 | 1110 | 980 | 600 | 5000 | 706 | 2830 | 2110 | 734 | 287 | 1180 | 1080 |
| 20 | 555 | 1020 | 960 | 500 | 9000 | 770 | 2760 | 1780 | 672 | 299 | 930 | 959 |
| 21 | 568 | 1000 | 920 | 330 | 13900 | 741 | 2180 | 1440 | 645 | 394 | 770 | 942 |
| 22 | 586 | 1010 | 900 | 500 | 12600 | 713 | 1660 | 1240 | 607 | 645 | 660 | 1540 |
| 23 | 586 | 957 | 840 | 580 | 10000 | 713 | 1580 | 1050 | 577 | 706 | 560 | 2790 |
| 24 | 555 | 939 | 820 | 600 | 10400 | 727 | 1470 | 917 | 589 | 595 | 500 | 3810 |
| 25 | 568 | 1130 | 780 | 600 | 9940 | 734 | 1630 | 853 | 626 | 502 | 460 | 3830 |
| 26 | 1630 | 1310 | 760 | 600 | 6970 | 727 | 1610 | 748 | 713 | 449 | 430 | 3050 |
| 27 | 2640 | 1280 | 760 | 600 | 5110 | 861 | 1470 | 713 | 1000 | 475 | 404 | 2620 |
| 28 | 2200 | 1230 | 760 | 600 | 3830 | 741 | 1320 | 672 | 1090 | 459 | 385 | 2780 |
| 29 | 1740 | 1340 | 780 | 600 | --- | 869 | 1190 | 672 | 909 | 784 | 366 | 2540 |
| 30 | 1430 | 1360 | 780 | 600 | --- | 1420 | 1370 | 659 | 720 | 1080 | 357 | 2120 |
| 31 | 1200 | --- | 760 | 600 | --- | 3010 | --- | 652 | --- | 968 | 366 | --- |
| TOTAL | 23985 | 39108 | 36400 | 18490 | 107690 | 41130 | 69190 | 50163 | 20651 | 14898 | 22995 | 45358 |
| MEAN | 774 | 1304 | 1174 | 596 | 3846 | 1327 | 2306 | 1618 | 688 | 481 | 742 | 1512 |
| MAX | 2640 | 2630 | 2310 | 740 | 13900 | 3140 | 5450 | 5950 | 1090 | 1080 | 1600 | 3830 |
| MIN | 390 | 822 | 760 | 330 | 620 | 706 | 1190 | 652 | 553 | 287 | 357 | 366 |

CAL YR 1980 TOTAL 464325 MEAN 1269 MAX 15700 MIN 317
WTR YR 1981 TOTAL 490058 MEAN 1343 MAX 13900 MIN 287

## 01318500 HUDSON RIVER AT HADLEY, NY

LOCATION.--Lat 43°19'08", long 73°50'41", Saratoga County, Hydrologic Unit 02020001, on right bank at Hadley, 400 ft (122 m) downstream from outlet of Lake Luzerne, and 0.3 mi (0.5 km) upstream from Sacandaga River.

DRAINAGE AREA.--1,664 mi² (4,310 km²).

PERIOD OF RECORD.--July 1921 to current year.

REVISED RECORDS.--WSP 561: 1921-22. WSP 756: Drainage area. WSP 1432: 1931 (m).

GAGE.--Water-stage recorder. Datum of gage is 563.99 ft (171.904 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records excellent except those for winter periods, which are fair. Some diurnal fluctuation caused by powerplant on Schroon River. Flow regulated by Indian Lake (see station 01314500) and other reservoirs above station.

AVERAGE DISCHARGE.--60 years, 2,900 ft³/s (82.13 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42,700 ft³/s (1,210 m³/s) Jan. 1, 1949, gage height, 21.21 ft (6.465 m); minimum, 281 ft³/s (7.96 m³/s) Sept. 3, 1934, gage height, 0.94 ft (0.287 m); minimum daily, 292 ft³/s (8.27 m³/s) July 24, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 15,000 ft³/s (420 m³/s) and maximum (*):

| Date | Time | Discharge (ft³/s) | Discharge (m³/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|
| Feb. 21 | 2000 | *30,000 | 850 | *16.12 | 4.913 |
| Feb. 25 | 1800 | 20,800 | 589 | 12.28 | 3.743 |

Minimum discharge, 478 ft³/s (13.5 m³/s) July 18, gage height, 1.55 ft (0.472 m); minimum daily, 484 ft³/s (13.7 m³/s) July 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 963 | 1620 | 2010 | 1000 | 800 | 8730 | 5200 | 2820 | 1560 | 1130 | 1350 | 641 |
| 2 | 883 | 1520 | 2020 | 1100 | 1000 | 7480 | 6920 | 2730 | 1500 | 991 | 1130 | 634 |
| 3 | 817 | 1410 | 2590 | 1100 | 1540 | 6440 | 7710 | 2710 | 1350 | 972 | 969 | 664 |
| 4 | 836 | 1300 | 2800 | 960 | 1580 | 5490 | 6470 | 2450 | 1310 | 906 | 854 | 729 |
| 5 | 876 | 1250 | 2120 | 920 | 1410 | 5030 | 5830 | 2190 | 1260 | 895 | 784 | 769 |
| 6 | 916 | 1350 | 2000 | 900 | 1500 | 4570 | 5820 | 2020 | 1220 | 1080 | 795 | 748 |
| 7 | 923 | 1530 | 2000 | 900 | 1650 | 4200 | 5430 | 2020 | 1210 | 1030 | 897 | 694 |
| 8 | 874 | 1640 | 2100 | 900 | 1690 | 3870 | 4650 | 1930 | 1160 | 967 | 1030 | 668 |
| 9 | 817 | 2600 | 2520 | 880 | 1630 | 3590 | 4040 | 1870 | 1120 | 862 | 1150 | 1200 |
| 10 | 753 | 2820 | 2940 | 840 | 1530 | 3350 | 3860 | 1780 | 1180 | 771 | 1360 | 1640 |
| 11 | 712 | 2730 | 2680 | 840 | 1630 | 3150 | 3780 | 1840 | 1270 | 687 | 1370 | 1920 |
| 12 | 664 | 2430 | 2110 | 860 | 3370 | 2980 | 3660 | 5090 | 1200 | 618 | 1370 | 2440 |
| 13 | 641 | 2010 | 2100 | 900 | 4820 | 2830 | 3530 | 9110 | 1120 | 578 | 1480 | 2610 |
| 14 | 622 | 1850 | 2100 | 920 | 4820 | 2610 | 3330 | 8600 | 1050 | 540 | 1420 | 2290 |
| 15 | 611 | 1790 | 1800 | 940 | 4740 | 2400 | 3350 | 6560 | 1120 | 525 | 1370 | 2080 |
| 16 | 596 | 1720 | 1600 | 1000 | 4440 | 2410 | 3180 | 5730 | 1310 | 508 | 1570 | 2090 |
| 17 | 584 | 1550 | 1600 | 1000 | 4130 | 2260 | 3060 | 5350 | 1510 | 493 | 2080 | 1850 |
| 18 | 612 | 1540 | 1600 | 1000 | 3980 | 2130 | 3260 | 4760 | 1470 | 484 | 2180 | 1710 |
| 19 | 668 | 1560 | 1600 | 940 | 4310 | 1820 | 4210 | 4210 | 1350 | 505 | 1940 | 1740 |
| 20 | 707 | 1560 | 1500 | 1000 | 7770 | 1760 | 4660 | 3730 | 1280 | 510 | 1640 | 1530 |
| 21 | 743 | 1490 | 1400 | 900 | 21700 | 1710 | 4130 | 3240 | 1460 | 570 | 1420 | 1530 |
| 22 | 755 | 1450 | 1400 | 680 | 20800 | 1650 | 3520 | 2870 | 1330 | 712 | 1240 | 1980 |
| 23 | 769 | 1380 | 1400 | 520 | 18100 | 1600 | 3090 | 2540 | 1200 | 990 | 1110 | 3850 |
| 24 | 764 | 1350 | 1400 | 700 | 17800 | 1590 | 3210 | 2300 | 1130 | 961 | 1010 | 4600 |
| 25 | 770 | 1530 | 1300 | 800 | 19700 | 1590 | 3240 | 2100 | 1120 | 826 | 910 | 5080 |
| 26 | 1600 | 1770 | 1100 | 840 | 15600 | 1570 | 3220 | 1900 | 1240 | 731 | 836 | 4580 |
| 27 | 2870 | 1730 | 1200 | 840 | 12300 | 1590 | 3030 | 1780 | 1350 | 898 | 770 | 3780 |
| 28 | 2800 | 1780 | 1200 | 840 | 10200 | 1680 | 2790 | 1690 | 1610 | 937 | 717 | 3970 |
| 29 | 2370 | 2020 | 1200 | 820 | --- | 1630 | 2630 | 1630 | 1550 | 1130 | 676 | 3900 |
| 30 | 2030 | 2090 | 1200 | 820 | --- | 1970 | 2660 | 1600 | 1330 | 1560 | 647 | 3550 |
| 31 | 1800 | --- | 1100 | 800 | --- | 3460 | --- | 1600 | --- | 1560 | 625 | --- |
| TOTAL | 32346 | 52370 | 55690 | 27460 | 194540 | 97140 | 123470 | 100750 | 38870 | 25927 | 36700 | 65467 |
| MEAN | 1043 | 1746 | 1796 | 886 | 6948 | 3134 | 4116 | 3250 | 1296 | 836 | 1184 | 2182 |
| MAX | 2870 | 2820 | 2940 | 1100 | 21700 | 8730 | 7710 | 9110 | 1610 | 1560 | 2180 | 5080 |
| MIN | 584 | 1250 | 1100 | 520 | 800 | 1570 | 2630 | 1600 | 1050 | 484 | 625 | 634 |

CAL YR 1980 TOTAL 793572 MEAN 2168 MAX 21000 MIN 440
WTR YR 1981 TOTAL 850730 MEAN 2331 MAX 21700 MIN 484

## 01321000 SACANDAGA RIVER NEAR HOPE, NY

LOCATION.--Lat 43°21'10", long 74°16'15", Hamilton County, Hydrologic Unit 02020002, on left bank 1.5 mi (2.4 km) downstream from West Branch Sacandaga River, on State Highway 30, and 4.5 mi (7.2 km) upstream from Hope.

DRAINAGE AREA.--491 mi$^2$ (1,272 km$^2$).

PERIOD OF RECORD.--September 1911 to current year.

GAGE.--Water-stage recorder. Datum of gage is 881.31 ft (268.623 m) National Geodetic Vertical Datum of 1929. Prior to July 24, 1929, nonrecording gage at site 300 ft (91 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Some seasonal regulation at Piseco Lake Outlet and, since 1959, intermittent regulation by Lake Algonquin at Wells 4 mi (6 km) upstream. Infrequent minor fluctuations by mill upstream.

AVERAGE DISCHARGE.--70 years, 1,099 ft$^3$/s (31.12 m$^3$/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,000 ft$^3$/s (906 m$^3$/s) Mar. 27, 1913, gage height, 11.0 ft (3.35 m), from floodmarks at site then in use; minimum, about 16 ft$^3$/s (0.45 m$^3$/s) Sept. 30, 1913, gage height, 1.17 ft (0.357 m); minimum daily, 18 ft$^3$/s (0.51 m$^3$/s) Sept. 20, 1913.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 9,100 ft$^3$/s (258 m$^3$/s) and maximum (*):

| Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) | Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 12 | 1430 | ice jam | | 7.69 | 2.344 | Feb. 20 | 2000 | *21,700 | 615 | 9.27 | 2.825 |
| Feb. 20 | 0500 | ice jam | | *12.00 | 3.658 | Feb. 24 | 1400 | 10,600 | 300 | 7.05 | 2.149 |
| | | | | | | May 12 | 1330 | 9,350 | 265 | 6.62 | 2.018 |

Minimum discharge, 67 ft$^3$/s (1.90 m$^3$/s) July 19, gage height, 1.39 ft (0.424 m); minimum daily, 70 ft$^3$/s (1.98 m$^3$/s) July 19.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 188 | 678 | 824 | 400 | 150 | 2530 | 2160 | 937 | 574 | 187 | 466 | 109 |
| 2 | 168 | 599 | 758 | 380 | 250 | 1930 | 4200 | 869 | 613 | 168 | 428 | 114 |
| 3 | 163 | 532 | 1920 | 350 | 250 | 1640 | 3230 | 804 | 295 | 168 | 365 | 224 |
| 4 | 168 | 499 | 1360 | 300 | 200 | 1510 | 2510 | 738 | 165 | 193 | 313 | 341 |
| 5 | 176 | 568 | 1080 | 270 | 180 | 1360 | 2360 | 677 | 122 | 231 | 242 | 271 |
| 6 | 168 | 609 | 1000 | 240 | 180 | 1070 | 2250 | 561 | 118 | 222 | 218 | 224 |
| 7 | 153 | 623 | 941 | 230 | 200 | 1050 | 1850 | 584 | 130 | 204 | 186 | 201 |
| 8 | 141 | 787 | 936 | 210 | 300 | 947 | 1590 | 557 | 161 | 170 | 193 | 234 |
| 9 | 128 | 910 | 1400 | 200 | 400 | 861 | 1450 | 513 | 193 | 148 | 239 | 1100 |
| 10 | 116 | 1420 | 1520 | 190 | 480 | 789 | 1450 | 487 | 206 | 132 | 218 | 805 |
| 11 | 112 | 1500 | 1150 | 180 | 560 | 736 | 1350 | 734 | 193 | 118 | 190 | 760 |
| 12 | 112 | 1200 | 979 | 170 | 660 | 686 | 1340 | 6220 | 176 | 130 | 193 | 696 |
| 13 | 109 | 859 | 1010 | 160 | 540 | 658 | 1210 | 5170 | 184 | 122 | 183 | 589 |
| 14 | 103 | 702 | 833 | 150 | 450 | 605 | 1340 | 2610 | 185 | 117 | 162 | 515 |
| 15 | 99 | 591 | 660 | 140 | 450 | 567 | 2000 | 2600 | 211 | 110 | 231 | 502 |
| 16 | 98 | 550 | 721 | 130 | 700 | 597 | 1720 | 2000 | 304 | 113 | 885 | 426 |
| 17 | 99 | 496 | 671 | 130 | 2000 | 511 | 1560 | 1950 | 722 | 128 | 740 | 369 |
| 18 | 166 | 456 | 639 | 120 | 4000 | 479 | 2740 | 1640 | 597 | 82 | 548 | 342 |
| 19 | 297 | 402 | 620 | 120 | 8000 | 434 | 2680 | 1380 | 435 | 70 | 451 | 320 |
| 20 | 281 | 386 | 600 | 120 | 12000 | 414 | 2140 | 1170 | 399 | 104 | 383 | 297 |
| 21 | 276 | 368 | 560 | 120 | 13800 | 385 | 1870 | 1000 | 571 | 178 | 329 | 283 |
| 22 | 275 | 357 | 540 | 130 | 9470 | 371 | 1640 | 878 | 578 | 180 | 248 | 1340 |
| 23 | 251 | 341 | 500 | 130 | 7130 | 364 | 1470 | 768 | 480 | 152 | 211 | 2330 |
| 24 | 227 | 369 | 480 | 140 | 8630 | 384 | 1510 | 621 | 538 | 124 | 199 | 2200 |
| 25 | 400 | 651 | 450 | 170 | 6720 | 391 | 1420 | 547 | 506 | 109 | 146 | 1650 |
| 26 | 1990 | 686 | 430 | 180 | 4900 | 386 | 1330 | 531 | 535 | 111 | 123 | 1260 |
| 27 | 1430 | 692 | 430 | 180 | 3750 | 466 | 1170 | 483 | 500 | 380 | 108 | 1180 |
| 28 | 1240 | 786 | 420 | 170 | 3160 | 497 | 880 | 448 | 346 | 390 | 99 | 1370 |
| 29 | 1010 | 990 | 410 | 150 | --- | 546 | 992 | 421 | 270 | 900 | 97 | 1220 |
| 30 | 891 | 940 | 400 | 140 | --- | 1010 | 1010 | 415 | 222 | 709 | 99 | 990 |
| 31 | 763 | --- | 400 | 140 | --- | 2550 | --- | 427 | --- | 512 | 102 | --- |
| TOTAL | 11798 | 20547 | 24642 | 5840 | 89510 | 26724 | 54422 | 38740 | 10529 | 6662 | 8595 | 22262 |
| MEAN | 381 | 685 | 795 | 188 | 3197 | 862 | 1814 | 1250 | 351 | 215 | 277 | 742 |
| MAX | 1990 | 1500 | 1920 | 400 | 13800 | 2550 | 4200 | 6220 | 722 | 900 | 885 | 2330 |
| MIN | 98 | 341 | 400 | 120 | 150 | 364 | 880 | 415 | 118 | 70 | 97 | 109 |

CAL YR 1980 TOTAL 305847 MEAN 836 MAX 11300 MIN 48
WTR YR 1981 TOTAL 320271 MEAN 877 MAX 13800 MIN 70

## 01323500 GREAT SACANDAGA LAKE AT CONKLINGVILLE, NY

LOCATION.--Lat 43°18'57", long 73°55'39", Saratoga County, Hydrologic Unit 02020002, 800 ft (244 m) upstream from right end of Conklingville Dam on Sacandaga River at Conklingville.

DRAINAGE AREA.—1,044 mi$^2$ (2,704 km$^2$).

PERIOD OF RECORD.--January 1930 to current year. Prior to October 1969, published as "Sacandaga Reservoir at Conklingville."

GAGE.—Water-stage recorder. Datum of gage is National Geodetic Vertical Datum, adjustment of 1912. Prior to Apr. 23, 1930, nonrecording gage at same datum in outlet channel 800 ft (244 m) downstream.

REMARKS.—Reservoir is formed by earth and concrete dam; storage began in March 1930; dam completed in 1930. Usable capacity for stream regulation, 29,670 mil ft$^3$ (840.3 hm$^3$) between elevations 735.0 ft (224.03 m) and 768.0 ft (234.09 m). Between elevations 768.0 ft (234.09 m) and 771.0 ft (235.00 m) (spillway crest) an additional 3,450 mil ft$^3$ (97.7 hm$^3$) is available exclusively for flood storage. Elevation of inverts of three Dow valves is 699.0 ft (213.06 m). Capacity of 4,600 mil ft$^3$ (130 hm$^3$) below elevation 735.0 ft (224.03 m) is considered dead storage, except for extraordinary emergencies or for necessary inspection of structures. Purpose of reservoir is to provide flood control and low-water stream regulation for sanitary improvement, navigation, and power, as required by the public welfare, including public health and safety. Area of water surface of reservoir filled to capacity, elevation, 771.0 ft (235.00 m), is 41.7 mi$^2$ (108 km$^2$).

COOPERATION.--Records furnished by Board of Hudson River-Black River Regulating District.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 770.78 ft (234.934 m) June 26, 1972, contents, 37,470 mil ft$^3$ (1,061 hm$^3$); minimum since first filling, 729.55 ft (222.367 m) Mar. 30, 1940, contents, 2,100 mil ft$^3$ (59.5 hm$^3$)

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 768.79 ft (234.327 m) May 14, contents, 35,170 mil ft$^3$ (996 hm$^3$); minimum, 746.64 ft (227.576 m) Feb. 10, contents, 13,010 mil ft$^3$ (368 hm$^3$).

Capacity table, current water year
(elevation, in feet, and contents, in billions of cubic feet)

| | | | |
|---|---|---|---|
| 738 | 6.43 | 760 | 25.61 |
| 740 | 7.80 | 764 | 29.85 |
| 745 | 11.64 | 768 | 34.27 |
| 750 | 15.94 | 771 | 37.72 |
| 755 | 20.11 | | |

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 755.33 | 752.53 | 752.01 | 751.19 | 746.81 | 761.35 | 762.31 | 767.03 | 766.89 | 765.15 | 762.20 | 759.36 |
| 2 | 755.20 | 752.47 | 752.05 | 751.08 | 746.98 | 761.64 | 762.81 | 767.00 | 766.79 | 765.02 | 762.16 | 759.14 |
| 3 | 755.04 | 752.45 | 752.22 | 750.91 | 746.96 | 761.89 | 763.35 | 767.04 | 766.69 | 764.96 | 762.14 | 759.04 |
| 4 | 754.94 | 752.35 | 752.37 | 750.94 | 746.94 | 762.08 | 763.72 | 767.06 | 766.62 | 764.96 | 762.04 | 758.92 |
| 5 | 754.93 | 752.28 | 752.41 | 750.79 | 746.93 | 762.26 | 764.07 | 767.05 | 766.50 | 765.00 | 761.95 | 758.82 |
| 6 | 754.79 | 752.18 | 752.41 | 750.60 | 746.88 | 762.45 | 764.41 | 767.02 | 766.42 | 765.04 | 761.82 | 758.76 |
| 7 | 754.64 | 752.03 | 752.45 | 750.48 | 746.83 | 762.60 | 764.48 | 766.97 | 766.34 | 764.93 | 761.71 | 758.72 |
| 8 | 754.51 | 751.96 | 752.57 | 750.24 | 746.87 | 762.75 | 764.52 | 766.93 | 766.28 | 764.86 | 761.57 | 758.64 |
| 9 | 754.31 | 751.96 | 752.59 | 750.13 | 746.99 | 762.86 | 764.58 | 766.87 | 766.23 | 764.71 | 761.51 | 758.71 |
| 10 | 754.12 | 752.16 | 752.67 | 749.98 | 746.84 | 762.90 | 764.63 | 766.85 | 766.09 | 764.52 | 761.46 | 758.66 |
| 11 | 753.96 | 752.15 | 752.68 | 750.02 | 746.79 | 762.92 | 764.71 | 766.93 | 765.99 | 764.39 | 761.33 | 758.60 |
| 12 | 753.99 | 752.21 | 752.64 | 749.84 | 746.94 | 762.92 | 764.78 | 767.46 | 765.85 | 764.30 | 761.20 | 758.55 |
| 13 | 753.81 | 752.20 | 752.64 | 749.66 | 747.30 | 762.91 | 764.96 | 768.56 | 765.74 | 764.25 | 761.06 | 758.53 |
| 14 | 753.60 | 752.17 | 752.70 | 749.46 | 747.59 | 762.90 | 765.07 | 768.76 | 765.67 | 764.10 | 760.95 | 758.51 |
| 15 | 753.37 | 752.09 | 752.68 | 749.27 | 747.84 | 762.90 | 765.20 | 768.66 | 765.66 | 763.90 | 760.85 | 758.40 |
| 16 | 753.17 | 752.06 | 752.60 | 749.11 | 748.08 | 762.92 | 765.35 | 768.47 | 765.58 | 763.73 | 761.00 | 758.26 |
| 17 | 752.97 | 752.01 | 752.52 | 748.98 | 748.20 | 762.86 | 765.40 | 768.14 | 765.56 | 763.55 | 761.05 | 758.14 |
| 18 | 752.86 | 751.94 | 752.40 | 749.00 | 748.35 | 762.78 | 765.62 | 767.84 | 765.51 | 763.36 | 760.90 | 758.04 |
| 19 | 752.93 | 751.82 | 752.32 | 748.82 | 748.60 | 762.66 | 765.89 | 767.65 | 765.45 | 763.26 | 760.78 | 757.92 |
| 20 | 752.80 | 751.71 | 752.19 | 748.60 | 749.67 | 762.56 | 766.15 | 767.58 | 765.42 | 763.25 | 760.66 | 757.90 |
| 21 | 752.63 | 751.58 | 752.19 | 748.43 | 752.95 | 762.46 | 766.29 | 767.53 | 765.56 | 763.14 | 760.54 | 757.81 |
| 22 | 752.47 | 751.45 | 752.10 | 748.25 | 755.04 | 762.35 | 766.40 | 767.41 | 765.65 | 762.99 | 760.43 | 757.87 |
| 23 | 752.25 | 751.39 | 751.98 | 748.07 | 756.41 | 762.25 | 766.48 | 767.31 | 765.60 | 762.84 | 760.39 | 758.41 |
| 24 | 752.08 | 751.40 | 751.85 | 747.87 | 757.12 | 762.15 | 766.65 | 767.32 | 765.52 | 762.67 | 760.36 | 758.78 |
| 25 | 751.88 | 751.53 | 751.81 | 747.93 | 759.00 | 762.05 | 766.80 | 767.36 | 765.46 | 762.52 | 760.19 | 758.99 |
| 26 | 752.57 | 751.59 | 751.75 | 747.73 | 759.85 | 761.96 | 766.95 | 767.30 | 765.43 | 762.46 | 760.04 | 759.05 |
| 27 | 752.54 | 751.60 | 751.59 | 747.52 | 760.44 | 761.89 | 766.99 | 767.19 | 765.37 | 762.48 | 759.88 | 759.11 |
| 28 | 752.55 | 751.64 | 751.55 | 747.35 | 760.93 | 761.83 | 767.00 | 767.08 | 765.37 | 762.36 | 759.70 | 759.20 |
| 29 | 752.62 | 751.78 | 751.52 | 747.14 | --- | 761.86 | 767.04 | 766.96 | 765.37 | 762.39 | 759.56 | 759.17 |
| 30 | 752.55 | 751.94 | 751.40 | 746.99 | --- | 761.87 | 767.04 | 766.90 | 765.28 | 762.36 | 759.48 | 759.11 |
| 31 | 752.52 | --- | 751.25 | 746.76 | --- | 762.10 | --- | 766.90 | --- | 762.29 | 759.45 | --- |
| MEAN | 753.48 | 751.95 | 752.20 | 749.13 | 750.36 | 762.38 | 765.32 | 767.39 | 765.86 | 763.73 | 760.91 | 758.64 |
| MAX | 755.33 | 752.53 | 752.70 | 751.19 | 760.93 | 762.92 | 767.04 | 768.76 | 766.89 | 765.15 | 762.20 | 759.36 |
| MIN | 751.88 | 751.39 | 751.25 | 746.76 | 746.79 | 761.35 | 762.31 | 766.85 | 765.28 | 762.29 | 759.45 | 757.81 |
| * | 18.31 | 17.74 | 17.01 | 13.14 | 26.81 | 27.89 | 33.17 | 33.06 | 31.16 | 27.94 | 24.97 | 24.64 |
| ** | -1023 | -220 | -273 | -1445 | +5651 | +403 | +2037 | -41 | -733 | -1202 | -1109 | -127 |

CAL YR 1980 MEAN 755.78 MAX 768.46 MIN 739.42 ** +23
WTR YR 1981 MEAN 758.49 MAX 768.76 MIN 746.76 ** +114

* Contents, in billons of cubic feet, at 2400 hours on last day of month.
** Change in contents, equivalent in cubic feet per second.

## 01325000 SACANDAGA RIVER AT STEWARTS BRIDGE, NEAR HADLEY, NY

**LOCATION.**--Lat 43°18'41", long 73°52'04", Saratoga County, Hydrologic Unit 02020002, on left bank 1.0 mi (1.6 km) downstream from Stewarts Bridge, 1.1 mi (1.8 km) west of Hadley, 1.4 mi (2.3 km) upstream from mouth, and 1.5 mi (2.4 km) downstream from Stewarts Bridge hydroelectric plant.

**DRAINAGE AREA.**--1,055 mi² (2,732 km²).

**PERIOD OF RECORD.**--September 1907 to current year. Published as "near Hadley" 1907-1910, "at Hadley" 1911-32 and "at Conklingville" 1932-52. Records published for both sites October 1951 to September 1952.

**REVISED RECORDS.**--WSP 1302: 1908. WSP 1432: 1910-12, 1916-21.

**GAGE.**--Water-stage recorder. Datum of gage is 582.00 ft (177.394 m) National Geodetic Vertical Datum of 1929. Prior to Jan. 1, 1911, nonrecording gage at site about 1 mi (2 km) upstream at different datum. Jan. 1, 1911 to Sept. 30, 1932, water-stage recorder at site 0.8 mi (1.3 km) downstream at datum 8.82 ft (2.688 m) lower than present datum. Oct. 1, 1932 to Sept. 30, 1952, water-stage recorder at site 3.6 mi (5.8 km) upstream at datum 85.47 ft (26.051 m) higher than present datum.

**REMARKS.**--Records good above 10 ft³/s (0.28 m³/s) and fair below. Flow regulated by Great Sacandaga Lake since Mar. 27, 1930 (see station 01323500); no discharge over spillway during year. Extensive diurnal fluctuation caused by release of water from Great Sacandaga Lake, through Elmer J. West hydroelectric station as directed by Board of Hudson River-Black River Regulating District, and through Stewarts Bridge hydroelectric station.

**COOPERATION.**--From Oct. 1, 1932, to Dec. 4, 1979 discharge computed by Board of Hudson River-Black River Regulating District from rating developed by Geological Survey. Since Dec. 4, 1979, discharge computed by U.S. Geological Survey.

**AVERAGE DISCHARGE.**--74 years, 2,138 ft³/s (60.55 m³/s), adjusted for storage since 1930.

**EXTREMES FOR PERIOD OF RECORD.**--Maximum discharge, about 35,500 ft³/s (1,010 m³/s) Mar. 28, 1913, gage height, 12.36 ft (3.767 m) site and datum then in use; minimum, 5.3 ft³/s (0.15 m³/s) Mar. 17, 18, 1964, Apr. 29 to May 4, May 5, 6, 1965: minimum daily, 5.3 ft³/s (0.15 m³/s) Apr. 30 to May 3, 1965. Maximum discharge since construction of Conklingville Dam in 1930, 13,300 ft³/s (377 m³/s) July 1, 1968, gage height, 9.54 ft (2.908 m).

**EXTREMES FOR CURRENT YEAR.**--Maximum discharge, 8,120 ft³/s (230 m³/s) May 16, gage height, 7.50 ft (2.286 m); minimum recorded 6.8 ft³/s (0.19 m³/s) Mar. 2-10, but may have been less during periods when silt settled in well obstructing the float Oct. 1 to Feb. 27.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1800 | 2000 | 1730 | 49 | 46 | 7.7 | 1030 | 1440 | 1950 | 1860 | 1730 | 2080 |
| 2 | 1940 | 54 | 1660 | 2170 | 2230 | 7.1 | 32 | 1550 | 1850 | 1890 | 33 | 2060 |
| 3 | 2050 | 1920 | 1670 | 2210 | 2210 | 6.8 | 28 | 45 | 1750 | 1850 | 1820 | 2080 |
| 4 | 2060 | 2110 | 1620 | 46 | 2200 | 6.8 | 27 | 1520 | 1900 | 52 | 2020 | 2070 |
| 5 | 45 | 2120 | 1640 | 2200 | 2220 | 6.8 | 27 | 1640 | 1890 | 27 | 2070 | 1900 |
| 6 | 2200 | 1990 | 1630 | 2190 | 2140 | 6.8 | 2140 | 1570 | 1920 | 1970 | 2160 | 36 |
| 7 | 2010 | 1990 | 42 | 2220 | 2260 | 6.8 | 2070 | 1500 | 66 | 1910 | 1860 | 1400 |
| 8 | 1990 | 1960 | 1770 | 2190 | 48 | 6.8 | 1960 | 1570 | 1830 | 1830 | 2050 | 2040 |
| 9 | 2190 | 54 | 1840 | 2210 | 2180 | 6.8 | 2010 | 1560 | 1860 | 2000 | 47 | 2380 |
| 10 | 2240 | 1970 | 1860 | 2210 | 2170 | 11 | 1990 | 50 | 1870 | 2030 | 1970 | 2030 |
| 11 | 2220 | 1310 | 1860 | 44 | 2210 | 1490 | 992 | 1540 | 1870 | 1990 | 1750 | 2010 |
| 12 | 44 | 1250 | 1770 | 2170 | 2000 | 1530 | 30 | 1990 | 1710 | 46 | 1930 | 2040 |
| 13 | 2220 | 1660 | 1840 | 2190 | 1540 | 1460 | 1470 | 4860 | 1680 | 2180 | 1900 | 34 |
| 14 | 2190 | 1710 | 48 | 2200 | 1590 | 1500 | 1490 | 5140 | 52 | 2180 | 1930 | 2040 |
| 15 | 2380 | 1700 | 1960 | 2140 | 266 | 52 | 1510 | 6590 | 1880 | 2220 | 1880 | 2060 |
| 16 | 2370 | 53 | 2220 | 2210 | 1490 | 1980 | 1520 | 8000 | 2060 | 2200 | 31 | 2060 |
| 17 | 2330 | 1940 | 2190 | 2190 | 1540 | 1940 | 1500 | 7900 | 1520 | 2230 | 1880 | 2060 |
| 18 | 2170 | 2050 | 2220 | 46 | 1020 | 2080 | 1570 | 5810 | 1530 | 2270 | 1910 | 2020 |
| 19 | 45 | 2090 | 2270 | 2160 | 1070 | 2060 | 47 | 3990 | 1560 | 47 | 1790 | 2080 |
| 20 | 2150 | 1980 | 2250 | 2210 | 564 | 2040 | 1100 | 2250 | 1530 | 2280 | 1960 | 38 |
| 21 | 2190 | 1970 | 47 | 2170 | 445 | 2130 | 1050 | 2370 | 51 | 2260 | 1700 | 2050 |
| 22 | 2180 | 1990 | 2250 | 2200 | 8.0 | 2070 | 1030 | 2370 | 1820 | 2040 | 1880 | 2070 |
| 23 | 2170 | 53 | 2250 | 2200 | 2350 | 1970 | 1160 | 2360 | 1910 | 1880 | 35 | 2000 |
| 24 | 2350 | 2030 | 2250 | 2200 | 758 | 2000 | 1070 | 48 | 1850 | 1880 | 1890 | 1540 |
| 25 | 2330 | 1510 | 44 | 49 | 8.0 | 2030 | 1010 | 1520 | 1800 | 1840 | 2080 | 1690 |
| 26 | 46 | 1680 | 2210 | 2260 | 8.0 | 1970 | 31 | 2030 | 1810 | 44 | 2090 | 1740 |
| 27 | 1900 | 997 | 2190 | 2210 | 8.0 | 1990 | 2000 | 1860 | 1670 | 1990 | 2040 | 1690 |
| 28 | 1580 | 1730 | 49 | 2180 | 8.1 | 1970 | 1530 | 2250 | 47 | 2230 | 2050 | 1990 |
| 29 | 1560 | 1680 | 2200 | 2240 | --- | 50 | 1520 | 2060 | 1720 | 2060 | 2050 | 2050 |
| 30 | 2030 | 51 | 2220 | 2220 | --- | 1900 | 1570 | 2040 | 1670 | 1750 | 35 | 2060 |
| 31 | 2010 | --- | 2200 | 2240 | --- | 1940 | --- | 51 | --- | 1720 | 2130 | --- |
| TOTAL | 56990 | 45602 | 52000 | 57424 | 34587.1 | 36225.4 | 34514 | 79474 | 46626 | 52756 | 50701 | 53398 |
| MEAN | 1838 | 1520 | 1677 | 1852 | 1235 | 1169 | 1150 | 2564 | 1554 | 1702 | 1636 | 1780 |
| MAX | 2380 | 2120 | 2270 | 2260 | 2350 | 2130 | 2140 | 8000 | 2060 | 2280 | 2160 | 2380 |
| MIN | 44 | 51 | 42 | 44 | 8.0 | 6.8 | 27 | 45 | 47 | 27 | 31 | 34 |

CAL YR 1980 TOTAL 567335.6 MEAN 1550 MAX 4040 MIN 7.4
WTR YR 1981 TOTAL 600297.5 MEAN 1645 MAX 8000 MIN 6.8

## 01327750 HUDSON RIVER AT FORT EDWARD, NY

LOCATION.--Lat 43°16'10", long 73°35'47", Washington County, Hydrologic Unit 02020003, on left bank 40 ft (12 m) upstream from Scott Paper Mill, 150 ft (46 m) south of River Street in Fort Edward, and 0.4 mi (0.6 km) upstream from bridge on State Highway 197.

DRAINAGE AREA.--2,817 $mi^2$ (7,296 $km^2$).

PERIOD OF RECORD.--December 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is 100.00 ft (30.480 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Flow regulated appreciably by Great Sacandaga Lake (see station 01323500) and Indian Lake (see station 01314500). Diurnal fluctuation caused by powerplants upstream from station. Water is diverted into St. Lawrence River basin through Glens Falls feeder (see station 01327500), Bond Creek (see station 01328000), and Champlain (Barge) Canal, and occasionally may be received from that basin through summit level of Champlain (Barge) Canal at Dunham Basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 34,000 $ft^3/s$ (963 $m^3/s$) Apr. 29, 1979, gage height 28.09 ft (8.562 m); maximum gage height, 28.71 ft (8.751 m) Jan. 11, 1978, ice jam; minimum discharge, 400 $ft^3/s$ (11.3 $m^3/s$) Sept. 4, 1978, gage height, 19.33 ft (5.892 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 27,600 $ft^3/s$ (782 $m^3/s$) Feb. 22, gage height, 26.68 ft (8.132 m); minimum discharge, 710 $ft^3/s$ (20.1 $m^3/s$) July 12, 26, gage height, 20.11 ft (6.130 m).

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2370 | 3490 | 3540 | 1300 | 1000 | 9500 | 6250 | 3720 | 3630 | 2730 | 2830 | 2180 |
| 2 | 2480 | 1990 | 3390 | 3400 | 2780 | 8000 | 6730 | 4660 | 3480 | 2550 | 1340 | 2730 |
| 3 | 2420 | 2590 | 3700 | 3500 | 3780 | 7000 | 7800 | 2800 | 3190 | 2670 | 2210 | 2600 |
| 4 | 2550 | 3100 | 4270 | 1200 | 5110 | 6000 | 7240 | 4160 | 2990 | 1700 | 2620 | 2300 |
| 5 | 1280 | 3130 | 3700 | 3300 | 4750 | 5400 | 6010 | 3900 | 2990 | 991 | 2750 | 2230 |
| 6 | 2690 | 3210 | 3560 | 3300 | 4670 | 4800 | 6940 | 3420 | 3080 | 2450 | 2670 | 1120 |
| 7 | 2970 | 3130 | 1770 | 3300 | 3670 | 4400 | 7630 | 3600 | 2070 | 2750 | 2470 | 1580 |
| 8 | 2830 | 3280 | 3890 | 3300 | 2010 | 4100 | 6770 | 3300 | 2600 | 2620 | 2450 | 2520 |
| 9 | 2700 | 2890 | 3910 | 3300 | 3590 | 3800 | 6450 | 3510 | 2780 | 2650 | 1750 | 3080 |
| 10 | 2820 | 4020 | 4370 | 3200 | 4260 | 3500 | 5890 | 2090 | 2970 | 2470 | 2570 | 3570 |
| 11 | 2820 | 4060 | 4530 | 1100 | 3780 | 4800 | 5370 | 3100 | 2990 | 2550 | 3080 | 3420 |
| 12 | 1220 | 3740 | 3740 | 3200 | 4950 | 4700 | 3720 | 5180 | 2800 | 916 | 2860 | 3540 |
| 13 | 2230 | 3300 | 3550 | 3300 | 6960 | 4500 | 4900 | 12900 | 2860 | 2070 | 2860 | 3240 |
| 14 | 2710 | 3320 | 2910 | 3300 | 6380 | 4300 | 5150 | 14900 | 1210 | 2250 | 3080 | 3360 |
| 15 | 2880 | 3110 | 3810 | 3300 | 5930 | 2700 | 4930 | 13000 | 2520 | 2500 | 2970 | 3660 |
| 16 | 2330 | 1670 | 3680 | 3400 | 5270 | 4600 | 4760 | 14100 | 2990 | 2550 | 2110 | 3720 |
| 17 | 2740 | 3140 | 3900 | 3400 | 5550 | 4400 | 4790 | 13400 | 3270 | 2420 | 2880 | 3630 |
| 18 | 2680 | 3360 | 3900 | 1200 | 5520 | 4400 | 4860 | 11800 | 2860 | 2420 | 3750 | 3630 |
| 19 | 1210 | 3600 | 3900 | 3300 | 4860 | 4030 | 4000 | 8120 | 2800 | 916 | 3570 | 3240 |
| 20 | 2320 | 3290 | 3900 | 3400 | 7450 | 4030 | 5180 | 6730 | 2650 | 2900 | 3570 | 2400 |
| 21 | 2840 | 3330 | 1600 | 3300 | 20300 | 3970 | 5590 | 5780 | 1380 | 2900 | 2800 | 2730 |
| 22 | 3060 | 3070 | 3800 | 3100 | 23000 | 3970 | 4930 | 5550 | 2600 | 2850 | 2570 | 3660 |
| 23 | 3050 | 1570 | 3800 | 2900 | 20300 | 3930 | 4120 | 5150 | 2940 | 3000 | 1380 | 4250 |
| 24 | 2660 | 2830 | 3450 | 3100 | 20500 | 3690 | 4420 | 3510 | 2910 | 3000 | 2570 | 6170 |
| 25 | 2760 | 3310 | 1500 | 1000 | 21000 | 3810 | 4160 | 3220 | 2700 | 2550 | 2470 | 5590 |
| 26 | 2460 | 3090 | 3500 | 3300 | 18300 | 3780 | 3660 | 4250 | 2970 | 941 | 2470 | 6050 |
| 27 | 3580 | 2660 | 3600 | 3200 | 13300 | 3600 | 4620 | 4720 | 2970 | 2450 | 2450 | 5110 |
| 28 | 3920 | 2980 | 1400 | 3200 | 11000 | 3870 | 4490 | 2880 | 1770 | 2500 | 2280 | 4930 |
| 29 | 3870 | 3240 | 3600 | 3200 | --- | 2210 | 4450 | 3480 | 2620 | 2910 | 2450 | 5510 |
| 30 | 3790 | 2430 | 3600 | 3200 | --- | 3810 | 4090 | 3870 | 3130 | 3130 | 1470 | 5040 |
| 31 | 3690 | --- | 3500 | 3200 | --- | 4860 | --- | 1510 | --- | 3020 | 2160 | --- |
| TOTAL | 83930 | 91930 | 107270 | 90700 | 239970 | 140460 | 159900 | 182310 | 82720 | 74324 | 79460 | 106790 |
| MEAN | 2707 | 3064 | 3460 | 2926 | 8570 | 4531 | 5330 | 5881 | 2757 | 2398 | 2563 | 3560 |
| MAX | 3920 | 4060 | 4530 | 3500 | 23000 | 9500 | 7800 | 14900 | 3630 | 3130 | 3750 | 6170 |
| MIN | 1210 | 1570 | 1400 | 1000 | 1000 | 2210 | 3660 | 1510 | 1210 | 916 | 1340 | 1120 |

CAL YR 1980 TOTAL 1343808 MEAN 3672 MAX 20600 MIN 928
WTR YR 1981 TOTAL 1439764 MEAN 3945 MAX 23000 MIN 916

## 01327755 HUDSON RIVER AT ROGERS ISLAND AT FORT EDWARD, NY

LOCATION.--Lat 43°15'52", long 73°35'28", Saratoga-Washington Counties, Hydrologic Unit 02020003, at bridges on State Highway 197 over Rogers Island in Fort Edward, 0.4 mi (0.6 km) downstream from discharge station (01327750, Hudson River at Fort Edward), and 0.6 mi (1.0 km) upstream from Champlain Canal.

DRAINAGE AREA.--2,817 mi² (7,296 km²), at gage.

PERIOD OF RECORD.--Water years 1975 to current year.
CHEMICAL DATA: 1975-76 (a), 1980 (b), 1981 (d).
MINOR ELEMENT DATA: 1975 (b), 1976-77 (a), 1978-79 (e), 1980 (d).
PESTICIDE DATA: 1975, 1977 (a); 1978-79 (e), 1980 (a).
ORGANIC DATA: OC—1975 (a).
PCB--1975, 1977 (a); 1978-81 (e).
PCN--1977 (a), 1978-79 (e), 1980 (a).
NUTRIENT DATA: 1975-77 (a), 1978 (e).
SEDIMENT DATA: 1975 (b), 1980-81 (e).

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: March 1978 to September 1979.

REMARKS.--Water-discharge data is that for Hudson River at Fort Edward (station 01327750). Supplemental samples collected from navigation canal (east channel) are designated by the value 40 for sample source code.

### WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | TIME | SAMPLE SOURCE | STREAM-FLOW, INSTAN-TANEOUS (CFS) | SPE-CIFIC CON-DUCT-ANCE (UMHOS) | PH (UNITS) | SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) | SOLIDS, VOLA-TILE, SUS-PENDED (MG/L) | PCB, TOTAL (UG/L) | SEDI-MENT, SUS-PENDED (MG/L) | SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | |
| 29... | 0800 | — | 3870 | — | — | 10 | 8 | <.10 | 2 | 21 |
| 29... | 0830 | 40 | 3870 | — | — | 8 | 4 | .10 | 2 | 21 |
| NOV | | | | | | | | | | |
| 13... | 1245 | — | 2910 | — | — | 13 | 6 | .00 | 6 | 47 |
| 13... | 1315 | 40 | 2910 | — | — | 14 | 8 | .00 | 3 | 24 |
| DEC | | | | | | | | | | |
| 18... | 1245 | — | 4830 | — | — | — | — | <.10 | 2 | 26 |
| 18... | 1345 | 40 | 4350 | — | — | — | — | <.10 | 3 | 35 |
| FEB | | | | | | | | | | |
| 21... | 1245 | 40 | 22800 | 61 | 7.2 | — | — | .10 | 51 | 3140 |
| 21... | 1300 | — | 22800 | 61 | 7.2 | — | — | <.10 | 61 | 3760 |
| 21... | 1530 | 40 | 23700 | 61 | 7.2 | — | — | <.10 | 38 | 2430 |
| 21... | 1545 | — | 23800 | 58 | 7.3 | — | — | .10 | 49 | 3150 |
| 21... | 1845 | 40 | 23000 | 54 | 7.3 | — | — | .10 | 49 | 3040 |
| 21... | 1900 | — | 23000 | 53 | 7.2 | — | — | .00 | 52 | 3230 |
| 22... | 1000 | 40 | 22600 | 51 | 7.1 | — | — | .30 | 29 | 1770 |
| 22... | 1015 | — | 22600 | 53 | 7.4 | — | — | <.10 | 31 | 1890 |
| 23... | 0830 | — | 19900 | 49 | 7.0 | — | — | .20 | 14 | 752 |
| 23... | 0845 | 40 | 19900 | — | — | — | — | .20 | 18 | 967 |
| 25... | 0945 | 40 | 20200 | 53 | 6.7 | — | — | .10 | 12 | 654 |
| 25... | 1000 | — | 20200 | 50 | 6.6 | — | — | .10 | 8 | 436 |
| APR | | | | | | | | | | |
| 29... | 1015 | — | 4190 | — | — | — | — | <.10 | 9 | 102 |
| 29... | 1030 | 40 | 4190 | — | — | — | — | — | 4 | 45 |
| MAY | | | | | | | | | | |
| 29... | 1145 | 40 | 3570 | — | — | — | — | .10 | 4 | 39 |
| 29... | 1200 | — | 3570 | — | — | — | — | .10 | 4 | 39 |
| JUN | | | | | | | | | | |
| 05... | 1140 | 40 | 2940 | — | — | — | — | .10 | 5 | 40 |
| 05... | 1210 | — | 2860 | — | — | — | — | .10 | 4 | 31 |
| 07... | 0930 | — | 2280 | — | — | — | — | <.10 | 1 | 6.2 |
| 07... | 0945 | 40 | 2280 | — | — | — | — | <.10 | 3 | 18 |
| 12... | 0950 | 40 | 2370 | — | — | — | — | .10 | 5 | 32 |
| 12... | 1010 | — | 2370 | — | — | — | — | <.10 | 4 | 26 |
| 17... | 1240 | 40 | 2750 | — | — | — | — | <.10 | 2 | 15 |
| 17... | 1310 | — | 2730 | — | — | — | — | <.10 | 1 | 7.4 |
| 25... | 1145 | 40 | 2520 | — | — | — | — | .10 | 4 | 27 |
| 25... | 1230 | — | 2520 | — | — | — | — | <.10 | 4 | 27 |
| JUL | | | | | | | | | | |
| 05... | 1800 | 40 | 954 | — | — | — | — | .20 | 1 | 2.6 |
| 05... | 1805 | 40 | 954 | — | — | — | — | .20 | — | — |
| 05... | 1900 | — | 941 | — | — | — | — | .10 | 1 | 2.5 |
| 05... | 1905 | — | 941 | — | — | — | — | .10 | — | — |
| 16... | 1345 | — | 2860 | — | — | — | — | .10 | 2 | 15 |
| 16... | 1415 | 40 | 3100 | — | — | — | — | .10 | 2 | 17 |
| 27... | 0745 | — | 2940 | — | — | — | — | .10 | 2 | 16 |
| JUL | | | | | | | | | | |
| 27... | 0815 | 40 | 2910 | — | — | — | — | .10 | 2 | 16 |
| 29... | 0715 | — | 2570 | — | — | — | — | .10 | 2 | 14 |
| 29... | 0745 | 40 | 2550 | — | — | — | — | .10 | 2 | 14 |
| AUG | | | | | | | | | | |
| 07... | 0800 | — | 2830 | — | — | — | — | <.10 | 2 | 15 |
| 07... | 0830 | 40 | 2800 | — | — | — | — | .10 | 4 | 30 |
| 12... | 0815 | — | 3160 | — | — | — | — | <.10 | 2 | 17 |
| 12... | 0830 | 40 | 3190 | — | — | — | — | <.10 | 2 | 17 |
| 14... | 1100 | 40 | 3240 | — | — | — | — | .20 | 2 | 17 |
| 14... | 1115 | — | 3270 | — | — | — | — | .10 | 2 | 18 |
| 17... | 1115 | 40 | 3130 | — | — | — | — | <.10 | 2 | 17 |
| 17... | 1130 | — | 3100 | — | — | — | — | <.10 | 2 | 17 |
| 21... | 1000 | 40 | 2990 | — | — | — | — | .00 | 2 | 16 |
| 21... | 1030 | — | 3270 | — | — | — | — | <.10 | 1 | 8.8 |
| 26... | 0945 | — | 2350 | — | — | — | — | <.10 | 1 | 6.3 |
| 26... | 1015 | 40 | 2320 | — | — | — | — | <.10 | 2 | 13 |
| 31... | 1100 | — | 2420 | — | — | — | — | <.10 | 0 | .00 |
| 31... | 1115 | 40 | 2470 | — | — | — | — | <.10 | 2 | 13 |

## 01328000 BOND CREEK AT DUNHAM BASIN, NY

LOCATION.--Lat 43°18'22", long 73°32'56", Washington County, Hydrologic Unit 02020003, on left bank at Dunham Basin, 800 ft (244 m) upstream from bridge on State Highway 196, 0.2 mi (0.3 km) upstream from Glens Falls feeder and abandoned Champlain Canal, 0.5 mi (0.8 km) upstream from Champlain (Barge) Canal, and 1.9 mi (3.1 km) east of courthouse at Hudson Falls.

DRAINAGE AREA.--14.7 mi$^2$ (38.1 km$^2$).

PERIOD OF RECORD.--June 1943 to current year. Prior to October 1950, published as "Bond Brook at Dunham Basin."

GAGE.--Water-stage recorder. Datum of gage is 140.30 ft (42.763 m) Barge Canal datum.

REMARKS.--Records poor. During canal navigation season, an indeterminate portion of flow is diverted at a point 0.5 mi (0.8 km) below gage into Lake Champlain basin through summit level of Champlain (Barge) Canal at Dunham Basin.

AVERACE DISCHARGE.--34 years, 17.7 ft$^3$/s (0.501 m$^3$/s), 16.35 in/yr (415 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,370 ft$^3$/s (38.8 m$^3$/s) Dec. 31, 1948, gage height, 8.52 ft (2.597 m); maximum gage height, 8.66 ft (2.640 m) Mar. 5, 1964 (backwater from ice); minimum discharge, 0.10 ft$^3$/s (0.003 m$^3$/s) Aug. 1, 2, 1965, Aug. 25, Sept. 19, 20, 1968, Sept. 12, 13, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 400 ft$^3$/s (11 m$^3$/s):

| Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|
| Feb. 11 | 2200 | 733 | 20.8 | a6.88 | 2.097 |

a Ice jam.

Minimum discharge, 0.92 ft$^3$/s (0.026 m$^3$/s) July 16, 17, 25, 26, Aug. 28-31, Sept. 7, 8; minimum gage height, 1.50 ft (0.457 m) July 16, 17, 25, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.9 | 1.7 | 9.0 | 1.8 | 2.5 | 34 | 7.2 | 6.0 | 6.0 | 1.2 | 1.7 | 1.1 |
| 2 | 2.1 | 1.5 | 7.6 | 1.8 | 150 | 27 | 24 | 5.6 | 3.5 | 1.2 | 1.5 | 1.2 |
| 3 | 2.1 | 1.5 | 14 | 1.7 | 60 | 20 | 16 | 5.4 | 2.8 | 2.1 | 1.4 | 1.2 |
| 4 | 2.8 | 1.5 | 11 | 1.7 | 20 | 17 | 11 | 5.2 | 2.8 | 3.3 | 1.4 | 1.2 |
| 5 | 2.8 | 1.7 | 5.2 | 1.6 | 12 | 17 | 12 | 5.2 | 2.6 | 2.8 | 1.4 | 1.5 |
| 6 | 2.4 | 1.7 | 3.9 | 1.6 | 10 | 15 | 15 | 5.4 | 2.4 | 3.1 | 1.4 | 1.2 |
| 7 | 1.9 | 1.9 | 3.3 | 1.5 | 9.0 | 9.5 | 11 | 6.4 | 2.4 | 2.4 | 1.4 | 1.1 |
| 8 | 1.9 | 1.9 | 3.3 | 1.5 | 8.2 | 9.0 | 8.6 | 6.0 | 2.1 | 1.7 | 1.9 | 1.5 |
| 9 | 1.9 | 2.6 | 3.9 | 1.5 | 7.4 | 8.6 | 8.1 | 5.8 | 2.8 | 1.4 | 1.2 | 11 |
| 10 | 2.1 | 3.1 | 3.6 | 1.5 | 7.0 | 8.6 | 9.0 | 5.6 | 3.3 | 1.2 | 1.1 | 8.6 |
| 11 | 2.8 | 2.8 | 3.1 | 1.5 | 250 | 8.6 | 8.1 | 17 | 2.6 | 1.2 | 1.4 | 4.5 |
| 12 | 4.9 | 2.6 | 3.1 | 1.5 | 120 | 8.6 | 7.6 | 60 | 2.4 | 1.4 | 1.7 | 3.1 |
| 13 | 2.8 | 2.6 | 2.8 | 1.4 | 20 | 8.1 | 6.3 | 30 | 2.4 | 2.1 | 1.9 | 2.8 |
| 14 | 1.9 | 2.4 | 3.1 | 1.4 | 15 | 8.1 | 7.6 | 20 | 2.4 | 1.5 | 1.4 | 2.1 |
| 15 | 1.7 | 2.4 | 3.9 | 1.4 | 12 | 6.8 | 12 | 17 | 3.1 | 1.2 | 2.1 | 1.7 |
| 16 | 1.9 | 2.4 | 3.3 | 1.4 | 10 | 6.8 | 8.1 | 23 | 3.1 | .92 | 11 | 1.5 |
| 17 | 1.9 | 2.6 | 2.8 | 1.4 | 9.4 | 5.5 | 7.2 | 19 | 2.4 | 1.2 | 6.8 | 1.5 |
| 18 | 2.8 | 2.8 | 3.1 | 1.4 | 9.0 | 5.5 | 12 | 15 | 2.1 | 1.4 | 2.6 | 1.4 |
| 19 | 3.1 | 2.1 | 2.8 | 1.4 | 45 | 5.2 | 11 | 11 | 1.9 | 1.5 | 1.7 | 1.5 |
| 20 | 3.3 | 2.1 | 2.7 | 1.4 | 170 | 5.2 | 11 | 9.6 | 3.1 | 1.9 | 1.2 | 1.7 |
| 21 | 2.8 | 2.4 | 2.6 | 1.5 | 120 | 5.2 | 6.8 | 8.6 | 4.5 | 2.4 | 1.1 | 1.5 |
| 22 | 2.8 | 2.4 | 2.5 | 1.5 | 90 | 5.2 | 5.5 | 7.6 | 5.2 | 2.4 | 1.2 | 37 |
| 23 | 3.1 | 2.6 | 2.5 | 1.5 | 58 | 4.9 | 5.5 | 6.6 | 7.2 | 1.7 | 1.1 | 91 |
| 24 | 2.8 | 5.5 | 2.4 | 1.6 | 178 | 4.9 | 9.0 | 5.8 | 4.2 | 1.1 | 1.2 | 128 |
| 25 | 3.9 | 20 | 2.3 | 1.7 | 176 | 5.5 | 9.0 | 5.4 | 3.6 | 1.1 | 1.2 | 53 |
| 26 | 7.2 | 13 | 2.2 | 1.7 | 134 | 5.5 | 7.6 | 4.9 | 7.2 | .92 | 1.1 | 30 |
| 27 | 4.2 | 8.6 | 2.2 | 1.7 | 63 | 6.3 | 6.8 | 4.5 | 3.9 | 1.4 | 2.8 | 21 |
| 28 | 2.8 | 7.6 | 2.1 | 1.7 | 40 | 6.3 | 5.9 | 4.3 | 2.4 | 1.4 | .92 | 33 |
| 29 | 2.8 | 25 | 2.0 | 1.7 | --- | 5.9 | 5.9 | 4.2 | 1.7 | 3.3 | .92 | 18 |
| 30 | 2.4 | 14 | 2.0 | 1.6 | --- | 5.9 | 6.3 | 4.3 | 1.5 | 3.3 | 1.1 | 11 |
| 31 | 1.9 | --- | 1.9 | 1.5 | --- | 7.6 | --- | 4.5 | --- | 2.1 | 1.1 | --- |
| TOTAL | 85.7 | 145.0 | 120.2 | 48.1 | 1805.5 | 297.3 | 281.1 | 338.9 | 97.6 | 55.84 | 59.94 | 474.9 |
| MEAN | 2.76 | 4.83 | 3.88 | 1.55 | 64.5 | 9.59 | 9.37 | 10.9 | 3.25 | 1.80 | 1.93 | 15.8 |
| MAX | 7.2 | 25 | 14 | 1.8 | 250 | 34 | 24 | 60 | 7.2 | 3.3 | 11 | 128 |
| MIN | 1.7 | 1.5 | 1.9 | 1.4 | 2.5 | 4.9 | 5.5 | 4.2 | 1.5 | .92 | .92 | 1.1 |
| CFSM | .19 | .33 | .26 | .11 | 4.39 | .65 | .64 | .74 | .22 | .12 | .13 | 1.08 |
| IN. | .22 | .37 | .30 | .12 | 4.57 | .75 | .71 | .86 | .25 | .14 | .15 | 1.20 |

CAL YR 1980 TOTAL 3691.34 MEAN 10.1 MAX 397 MIN .92 CFSM .69 IN 9.34
WTR YR 1981 TOTAL 3810.08 MEAN 10.4 MAX 250 MIN .92 CFSM .71 IN 9.64

## 01329000 BATTEN KILL AT ARLINGTON, VT

LOCATION.--Lat 43°04'38", long 73°09'26", Bennington County, Hydrologic Unit 02020003, on left bank 5 ft (1.5 m) upstream from bridge on Highway 313 at Arlington and 0.9 mi (1.4 km) downstream from Warm Brook.

DRAINAGE AREA.--152 mi$^2$ (394 km$^2$).

PERIOD OF RECORD.--October 1928 to current year.

REVISED RECORDS.--WSP 756: Drainage area. WSP 851: 1936 (maximum gage height). WSP 1302: 1929-34(M).

GAGE.--Water-stage recorder. Datum of gage is 596.68 ft (181.868 m), National Geodetic Vertical Datum of 1929. Prior to Nov. 18, 1941, nonrecording gage at downstream side of bridge at same datum.

REMARKS.--Records good except those for winter period, which are poor. Prior to 1949, diurnal fluctuation at low flow caused by mill upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--53 years, 339 ft$^3$/s (9.600 m$^3$/s), 30.29 in/yr (769 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,100 ft$^3$/s (314 m$^3$/s) Mar. 18, 1936, gage height, 11.3 ft (3.44 m), from floodmarks, present site, from rating curve extended above 6,100 ft$^3$/s (170 m$^3$/s) on basis of slope-area measurement at gage height 10.8 ft (3.29 m) and computation of peak flow over dam; minimum, 37 ft$^3$/s (1.05 m$^3$/s) Sept. 25, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,200 ft$^3$/s (62 m$^3$/s) and maximum (*):

| Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) | Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 21 | 1400 | *2860 | 81.0 | 8.30 | 2.530 | No other peak above base. | | | | | |

Minimum discharge, 83 ft$^3$/s (2.35 m$^3$/s) Oct. 2.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 86 | 164 | 352 | 150 | 110 | 580 | 1120 | 358 | 308 | 143 | 145 | 100 |
| 2 | 83 | 153 | 328 | 145 | 446 | 509 | 1320 | 323 | 212 | 134 | 125 | 98 |
| 3 | 97 | 142 | 581 | 120 | 932 | 440 | 925 | 301 | 192 | 134 | 116 | 96 |
| 4 | 230 | 140 | 440 | 110 | 571 | 374 | 654 | 279 | 192 | 134 | 151 | 94 |
| 5 | 244 | 148 | 330 | 100 | 353 | 354 | 1080 | 261 | 178 | 222 | 187 | 90 |
| 6 | 158 | 139 | 280 | 105 | 260 | 331 | 1550 | 251 | 165 | 350 | 209 | 88 |
| 7 | 127 | 131 | 264 | 110 | 210 | 316 | 963 | 246 | 175 | 231 | 153 | 86 |
| 8 | 113 | 133 | 281 | 120 | 193 | 305 | 639 | 231 | 155 | 170 | 125 | 87 |
| 9 | 103 | 144 | 562 | 120 | 189 | 293 | 556 | 219 | 275 | 141 | 126 | 288 |
| 10 | 95 | 260 | 453 | 110 | 192 | 275 | 560 | 209 | 358 | 129 | 184 | 171 |
| 11 | 96 | 199 | 314 | 105 | 317 | 268 | 505 | 212 | 225 | 117 | 141 | 131 |
| 12 | 121 | 164 | 259 | 100 | 1080 | 258 | 523 | 634 | 180 | 108 | 150 | 117 |
| 13 | 121 | 150 | 281 | 100 | 755 | 248 | 440 | 723 | 165 | 117 | 130 | 112 |
| 14 | 109 | 142 | 241 | 100 | 467 | 244 | 478 | 474 | 155 | 167 | 117 | 105 |
| 15 | 100 | 138 | 237 | 100 | 355 | 219 | 584 | 387 | 180 | 145 | 148 | 110 |
| 16 | 96 | 129 | 219 | 100 | 318 | 228 | 452 | 419 | 189 | 123 | 620 | 101 |
| 17 | 96 | 116 | 202 | 105 | 359 | 203 | 411 | 407 | 172 | 106 | 508 | 95 |
| 18 | 134 | 128 | 236 | 105 | 443 | 200 | 483 | 358 | 145 | 101 | 280 | 95 |
| 19 | 254 | 132 | 214 | 110 | 591 | 189 | 470 | 316 | 132 | 106 | 199 | 97 |
| 20 | 173 | 134 | 200 | 100 | 1320 | 194 | 403 | 290 | 127 | 121 | 161 | 117 |
| 21 | 141 | 130 | 195 | 100 | 2660 | 186 | 370 | 265 | 148 | 308 | 138 | 106 |
| 22 | 142 | 131 | 190 | 105 | 2030 | 180 | 339 | 248 | 167 | 275 | 128 | 116 |
| 23 | 130 | 127 | 185 | 110 | 1370 | 175 | 323 | 231 | 206 | 173 | 123 | 234 |
| 24 | 119 | 211 | 173 | 110 | 1430 | 183 | 478 | 219 | 160 | 132 | 131 | 500 |
| 25 | 136 | 946 | 170 | 110 | 1600 | 183 | 478 | 203 | 258 | 114 | 144 | 383 |
| 26 | 758 | 593 | 170 | 110 | 1290 | 180 | 457 | 192 | 889 | 106 | 126 | 250 |
| 27 | 454 | 376 | 165 | 109 | 859 | 231 | 391 | 180 | 423 | 215 | 116 | 195 |
| 28 | 280 | 350 | 165 | 100 | 639 | 231 | 350 | 173 | 261 | 170 | 110 | 299 |
| 29 | 225 | 675 | 165 | 97 | --- | 261 | 350 | 167 | 192 | 340 | 104 | 243 |
| 30 | 191 | 474 | 169 | 88 | --- | 806 | 407 | 173 | 160 | 299 | 105 | 189 |
| 31 | 174 | --- | 160 | 92 | --- | 1400 | --- | 320 | --- | 188 | 103 | --- |
| TOTAL | 5386 | 6999 | 8181 | 3346 | 21339 | 10044 | 18059 | 9269 | 6744 | 5319 | 5303 | 4793 |
| MEAN | 174 | 233 | 264 | 108 | 762 | 324 | 602 | 299 | 225 | 172 | 171 | 160 |
| MAX | 758 | 946 | 581 | 150 | 2660 | 1400 | 1550 | 723 | 889 | 350 | 620 | 500 |
| MIN | 83 | 116 | 160 | 88 | 110 | 175 | 323 | 167 | 127 | 101 | 103 | 86 |
| CFSM | 1.15 | 1.53 | 1.74 | .71 | 5.01 | 2.13 | 3.96 | 1.97 | 1.48 | 1.13 | 1.13 | 1.05 |
| IN. | 1.32 | 1.71 | 2.00 | .82 | 5.22 | 2.46 | 4.42 | 2.27 | 1.65 | 1.30 | 1.30 | 1.17 |

CAL YR 1980 TOTAL 87143 MEAN 238 MAX 2140 MIN 57 CFSM 1.57 IN 21.33
WTR YR 1981 TOTAL 104782 MEAN 287 MAX 2660 MIN 83 CFSM 1.89 IN 25.64

## 01329650 HUDSON RIVER AT SCHUYLERVILLE, NY

LOCATION.--Lat 43°05'54", long 73°34'25", at Saratoga-Washington County line, Hydrologic Unit 02020003, at bridge on State Highway 29, 0.2 mi (0.3 km) east of Schuylerville, 0.8 mi (1.3 km) downstream from Batten Kill, and 1.0 mi (1.6 km) downstream from Champlain (Barge) Canal lock 5.

DRAINAGE AREA.--3,440 mi² (8,910 km²) approximately.

PERIOD OF RECORD.--Water years 1977 to current year.
CHEMICAL DATA: 1980 (b), 1981 (c).
MINOR ELEMENTS DATA: 1977 (e), 1978-79 (d), 1980 (b).
PESTICIDE DATA: 1977 (e), 1978-79 (d).
ORGANIC DATA: PCB--1977 (e), 1978-80 (d), 1981 (e).
PCN--1977 (e), 1978-79 (d).
NUTRIENT DATA: 1977 (e), 1978 (d).
SEDIMENT DATA: 1980 (d), 1981 (e).

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: March 1977 to September 1979.

REMARKS.--Water discharge estimated from wire-weight gage located at bridge. Streamflow affected by regulation for power generation and diversion for canal operations.

### WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS (CFS) | SPE-CIFIC CON-DUCT-ANCE (UMHOS) | PH (UNITS) | SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) | SOLIDS, VOLA-TILE, SUS-PENDED (MG/L) | PCB, TOTAL (UG/L) | PCB, DIS-SOLVED (UG/L) | SEDI-MENT, SUS-PENDED (MG/L) | SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | |
| 29... | 0930 | 4590 | -- | -- | 2 | 2 | .20 | -- | 5 | 62 |
| NOV | | | | | | | | | | |
| 13... | 1045 | 4020 | -- | -- | 12 | 6 | .10 | -- | 4 | 43 |
| FEB | | | | | | | | | | |
| 21... | 1200 | 23200 | 89 | 7.3 | -- | -- | .30 | -- | 150 | 9400 |
| 21... | 1415 | 24300 | 76 | 7.1 | -- | -- | 1.7 | -- | 132 | 8660 |
| 21... | 1615 | 24800 | 74 | 7.2 | -- | -- | 1.2 | -- | 128 | 8570 |
| 21... | 1620 | 24800 | -- | -- | -- | -- | 1.2 | -- | -- | -- |
| 21... | 2045 | 25700 | 69 | 7.3 | -- | -- | .30 | -- | 94 | 6520 |
| 22... | 0900 | 27100 | 63 | 7.3 | -- | -- | .50 | -- | 73 | 5340 |
| 23... | 1030 | 22400 | 53 | 7.2 | -- | -- | <.10 | -- | 17 | 1030 |
| 25... | 1115 | 23300 | 67 | 6.5 | -- | -- | .10 | -- | 14 | 881 |
| APR | | | | | | | | | | |
| 29... | 1130 | 4370 | -- | -- | -- | -- | .20 | -- | 8 | 94 |
| MAY | | | | | | | | | | |
| 29... | 1030 | 4020 | -- | -- | -- | -- | .20 | -- | 5 | 54 |
| JUN | | | | | | | | | | |
| 05... | 1045 | 3370 | -- | -- | -- | -- | <.10 | -- | -- | -- |
| 05... | 1050 | 3370 | -- | -- | -- | -- | .20 | -- | 4 | 36 |
| 12... | 0855 | 3250 | -- | -- | -- | -- | .10 | -- | 5 | 44 |
| 17... | 1115 | 3330 | -- | -- | -- | -- | .20 | .1 | 3 | 27 |
| 25... | 1045 | 2960 | -- | -- | -- | -- | .10 | -- | 3 | 24 |
| 25... | 1050 | 2960 | -- | -- | -- | -- | .10 | -- | -- | -- |
| JUL | | | | | | | | | | |
| 06... | 1130 | 2450 | -- | -- | -- | -- | .20 | -- | -- | -- |
| 16... | 1230 | 2700 | -- | -- | -- | -- | .40 | -- | 3 | 22 |
| 16... | 1235 | 2700 | -- | -- | -- | -- | .40 | -- | -- | -- |
| 27... | 0930 | 700 | -- | -- | -- | -- | .20 | -- | 4 | 7.6 |
| 27... | 0935 | 700 | -- | -- | -- | -- | .30 | -- | -- | -- |
| 29... | 0845 | 3140 | -- | -- | -- | -- | .10 | -- | 3 | 25 |
| 29... | 0850 | 3140 | -- | -- | -- | -- | .10 | -- | -- | -- |
| AUG | | | | | | | | | | |
| 07... | 0930 | 3010 | -- | -- | -- | -- | .20 | -- | 3 | 24 |
| 12... | 1000 | 2790 | -- | -- | -- | -- | <.10 | -- | 2 | 15 |
| 14... | 1000 | 2700 | -- | -- | -- | -- | .10 | -- | 2 | 15 |
| 17... | 1015 | 4080 | -- | -- | -- | -- | .10 | -- | 4 | 44 |
| 21... | 0945 | 3180 | -- | -- | -- | -- | <.10 | -- | 2 | 17 |
| 26... | 1100 | 2920 | -- | -- | -- | -- | <.10 | -- | 4 | 32 |
| 31... | 1015 | 1010 | -- | -- | -- | -- | .10 | -- | 1 | 2.7 |

## 01330500 KAYADEROSSERAS CREEK NEAR WEST MILTON, NY

**LOCATION.**--Lat 43°02'18", long 73°54'35", Saratoga County, Hydrologic Unit 02020003, on left bank 600 ft (183 m) downstream from Glowegee Creek, 1.0 mi (1.6 km) east of West Milton, and 3.5 mi (5.6 km) northwest of Ballston Spa.

**DRAINAGE AREA.**--90.1 mi$^2$ (233.4 km$^2$).

**PERIOD OF RECORD.**--July 1927 to current year.

**REVISED RECORDS.**--WSP 741: Drainage area. WSP 1202: 1935-40.

**GAGE.**--Water-stage recorder. Datum of gage is 376.06 ft (114.623 m) National Geodetic Vertical Datum of 1929.

**REMARKS.**--Records good except those for the winter periods, which are poor. Slight occasional diurnal fluctuation at low flow caused by mills above station.

**AVERAGE DISCHARGE.**--54 years, 136 ft$^3$/s (3.852 m$^3$/s), 20.52 in/yr (521 mm/yr).

**EXTREMES FOR PERIOD OF RECORD.**--Maximum discharge, 4,710 ft$^3$/s (133 m$^3$/s) Mar. 18, 1936, gage height, 10.78 ft (3.286 m), from floodmarks; maximum gage height, 11.20 ft (3.414 m) Mar. 14, 1977, from floodmarks; minimum discharge, 6.1 ft$^3$/s (0.17 m$^3$/s) Aug. 23, 1927, gage height, 0.86 ft (0.262 m); minimum daily, 12 ft$^3$/s (0.34 m$^3$/s) Aug. 5-9, Sept. 8, 1964.

**EXTREMES FOR CURRENT YEAR.**--Peak discharge above base of 1,200 ft$^3$/s (34 m$^3$/s):

| Date | Time | Discharge (ft$^3$/s) | (m$^3$/s) | Gage height (ft) | (m) |
|---|---|---|---|---|---|
| Feb. 20 | Unknown | 3,010 | 85.2 | 8.36 | 2.548 (from floodmark) |

Minimum discharge, 18 ft$^3$/s (0.51 m$^3$/s) Oct. 22, Aug. 12, 14, 29-31, Sept. 6, 8.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 29 | 50 | 111 | 40 | 40 | 218 | 143 | 93 | 69 | 35 | 43 | 21 |
| 2 | 28 | 47 | 105 | 38 | 60 | 190 | 280 | 83 | 57 | 36 | 35 | 21 |
| 3 | 33 | 44 | 191 | 36 | 150 | 166 | 202 | 77 | 53 | 144 | 32 | 31 |
| 4 | 58 | 43 | 120 | 34 | 130 | 135 | 144 | 72 | 54 | 180 | 35 | 36 |
| 5 | 58 | 42 | 110 | 34 | 120 | 132 | 166 | 68 | 49 | 173 | 42 | 26 |
| 6 | 42 | 42 | 110 | 34 | 140 | 124 | 219 | 66 | 45 | 198 | 43 | 23 |
| 7 | 35 | 41 | 160 | 34 | 200 | 120 | 153 | 87 | 46 | 113 | 31 | 22 |
| 8 | 32 | 46 | 100 | 34 | 250 | 116 | 124 | 77 | 40 | 76 | 31 | 35 |
| 9 | 30 | 50 | 94 | 32 | 300 | 114 | 116 | 69 | 56 | 58 | 31 | 278 |
| 10 | 29 | 74 | 86 | 31 | 350 | 110 | 145 | 64 | 63 | 48 | 29 | 111 |
| 11 | 27 | 63 | 90 | 31 | 400 | 107 | 124 | 167 | 49 | 40 | 26 | 70 |
| 12 | 30 | 56 | 96 | 30 | 350 | 102 | 118 | 727 | 42 | 35 | 25 | 54 |
| 13 | 32 | 52 | 100 | 30 | 330 | 99 | 101 | 568 | 44 | 36 | 23 | 50 |
| 14 | 30 | 49 | 80 | 30 | 330 | 96 | 130 | 286 | 43 | 35 | 22 | 42 |
| 15 | 27 | 46 | 80 | 30 | 350 | 87 | 214 | 191 | 49 | 32 | 24 | 44 |
| 16 | 26 | 43 | 80 | 30 | 400 | 94 | 141 | 227 | 49 | 30 | 80 | 41 |
| 17 | 26 | 41 | 76 | 30 | 500 | 82 | 122 | 179 | 80 | 29 | 54 | 37 |
| 18 | 41 | 43 | 72 | 30 | 700 | 74 | 157 | 135 | 54 | 28 | 36 | 36 |
| 19 | 59 | 50 | 70 | 31 | 1100 | 74 | 138 | 114 | 41 | 29 | 28 | 37 |
| 20 | 42 | 46 | 66 | 32 | 2000 | 71 | 114 | 100 | 40 | 41 | 26 | 39 |
| 21 | 36 | 44 | 64 | 33 | 1300 | 66 | 99 | 90 | 85 | 78 | 23 | 37 |
| 22 | 35 | 47 | 62 | 34 | 800 | 67 | 92 | 81 | 67 | 60 | 21 | 185 |
| 23 | 35 | 48 | 60 | 35 | 450 | 68 | 91 | 72 | 72 | 38 | 22 | 397 |
| 24 | 32 | 115 | 56 | 36 | 587 | 72 | 174 | 66 | 52 | 34 | 22 | 245 |
| 25 | 55 | 364 | 54 | 37 | 500 | 74 | 143 | 60 | 53 | 28 | 23 | 154 |
| 26 | 239 | 199 | 52 | 40 | 408 | 74 | 122 | 57 | 138 | 28 | 20 | 107 |
| 27 | 130 | 123 | 50 | 38 | 299 | 78 | 104 | 54 | 89 | 58 | 20 | 89 |
| 28 | 86 | 116 | 48 | 37 | 238 | 82 | 96 | 53 | 60 | 47 | 19 | 111 |
| 29 | 70 | 190 | 46 | 35 | --- | 75 | 101 | 51 | 48 | 120 | 18 | 92 |
| 30 | 60 | 140 | 44 | 33 | --- | 91 | 109 | 54 | 40 | 82 | 20 | 75 |
| 31 | 53 | --- | 42 | 32 | --- | 213 | --- | 67 | --- | 54 | 20 | --- |
| TOTAL | 1545 | 2354 | 2575 | 1041 | 12782 | 3271 | 4182 | 4155 | 1727 | 2023 | 924 | 2546 |
| MEAN | 49.8 | 78.5 | 83.1 | 33.6 | 457 | 106 | 139 | 134 | 57.6 | 65.3 | 29.8 | 84.9 |
| MAX | 239 | 364 | 191 | 40 | 2000 | 218 | 280 | 727 | 138 | 198 | 80 | 397 |
| MIN | 26 | 41 | 42 | 30 | 40 | 66 | 91 | 51 | 40 | 28 | 18 | 21 |
| CFSM | .55 | .87 | .92 | .37 | 5.07 | 1.18 | 1.54 | 1.49 | .64 | .73 | .33 | .94 |
| IN. | .64 | .97 | 1.06 | .43 | 5.28 | 1.35 | 1.73 | 1.72 | .71 | .84 | .38 | 1.05 |

CAL YR 1980 TOTAL 34055 MEAN 93.0 MAX 1870 MIN 16 CFSM 1.03 IN 14.06
WTR YR 1981 TOTAL 39125 MEAN 107 MAX 2000 MIN 18 CFSM 1.19 IN 16.15

## 01331095 HUDSON RIVER AT STILLWATER, NY

LOCATION.--Lat 42°56'16", long 73°39'04" at Saratoga-Rensselaer County line, Hydrologic Unit 02020003, at bridge on State Highway 67 in Stillwater, 0.4 mi (0.6 km) upstream from Champlain (Barge) Canal lock 4, and 0.9 mi (1.4 km) upstream from Hoosic River.

DRAINAGE AREA.--3,773 $mi^2$ (9,772 $km^2$).

PERIOD OF RECORD.--Water years 1969 to 1975, 1977 to current year.
CHEMICAL DATA: 1969 (c), 1970-74 (d), 1975 (c), 1980 (b), 1981 (c).
MINOR ELEMENTS DATA: 1972 (b), 1973-75 (a), 1977-79 (e), 1980 (c).
PESTICIDE DATA: 1977-79 (e), 1980 (a).
ORGANIC DATA: OC--1974 (a), 1975 (c).
PCB--1977-81 (e).
PCN--1977-79 (e), 1980 (a).
NUTRIENT DATA: 1969 (c), 1970-74 (d), 1975 (c), 1977-78 (e).
SEDIMENT DATA: 1977 (d), 1978 (a), 1981 (e).

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: March 1977 to current year.

REMARKS.--Water-stage recorder installed Jan. 8, 1978. Water-discharge records are good above 3,000 $ft^3/s$ and fair below 3,000 $ft^3/s$. Streamflow affected by regulation for power generation and diversion for canal operations. No sediment data Dec. 22 to Feb. 16 due to ice cover and Mar. 6 to Apr. 1 due to no observer.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 189 mg/L Jan. 4, 1979; minimum daily mean, 1 mg/L on many days each year.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 10,600 tons (9,620 Mg) Apr. 29, 1979; minimum daily 4.0 (3.6 Mg) Sept. 7, 1980.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean 153 mg/L Feb. 21; minimum daily mean, 1 mg/L on many days.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 10,000 tons (9,072 Mg) Feb. 21; minimum daily, 4.0 tons (3.6 Mg) Sept. 7.

### WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | TIME | SAMPLE SOURCE | STREAM-FLOW, INSTAN-TANEOUS (CFS) | SPE-CIFIC CON-DUCT-ANCE (UMHOS) | PH (UNITS) | SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) | SOLIDS, VOLA-TILE, SUS-PENDED (MG/L) | PCB, TOTAL (UG/L) | SEDI-MENT, SUS-PENDED (MG/L) | SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | |
| 29... | 1015 | -- | 4290 | -- | -- | 10 | 8 | .20 | 6 | 69 |
| NOV | | | | | | | | | | |
| 13... | 0930 | -- | 4000 | -- | -- | 12 | 6 | .20 | 1 | 11 |
| DEC | | | | | | | | | | |
| 18... | 1100 | -- | 4140 | -- | -- | -- | -- | <.10 | 0 | .00 |
| FEB | | | | | | | | | | |
| 20... | 0845 | -- | 10000 | 124 | 7.5 | -- | -- | .10 | 33 | 891 |
| 21... | 1600 | -- | 29400 | 93 | 7.1 | -- | -- | .70 | 159 | 12600 |
| 21... | 2130 | -- | 30900 | 83 | 7.3 | -- | -- | .90 | 206 | 17200 |
| 22... | 1215 | -- | 31800 | 68 | 7.4 | -- | -- | 1.3 | 73 | 6270 |
| 23... | 1145 | -- | 25700 | 70 | 7.1 | -- | -- | .30 | 26 | 1800 |
| 25... | 1200 | -- | 26900 | 83 | 7.0 | -- | -- | .30 | 35 | 2540 |
| APR | | | | | | | | | | |
| 22... | 1400 | -- | 5260 | -- | -- | -- | -- | .10 | 4 | 57 |
| 29... | 1200 | -- | 4490 | -- | -- | -- | -- | .10 | 4 | 48 |
| MAY | | | | | | | | | | |
| 14... | 1200 | -- | 16800 | -- | -- | -- | -- | .30 | 19 | 862 |
| 29... | 0930 | -- | 3380 | -- | -- | -- | -- | .20 | 4 | 37 |
| JUN | | | | | | | | | | |
| 05... | 0840 | -- | 3290 | -- | -- | -- | -- | .10 | 5 | 44 |
| 12... | 0750 | -- | 2920 | -- | -- | -- | -- | .10 | 4 | 32 |
| 17... | 1000 | -- | 3610 | -- | -- | -- | -- | .10 | 1 | 9.7 |
| 17... | 1005 | -- | 3610 | -- | -- | -- | -- | <.10 | -- | -- |
| 25... | 0930 | -- | 2920 | -- | -- | -- | -- | .10 | 3 | 24 |
| JUL | | | | | | | | | | |
| 06... | 1215 | -- | 2490 | -- | -- | -- | -- | .20 | 1 | 6.7 |
| 16... | 1115 | -- | 2620 | -- | -- | -- | -- | .50 | 4 | 28 |
| 27... | 1000 | -- | 1770 | -- | -- | -- | -- | .30 | 3 | 14 |
| 29... | 0930 | -- | 3100 | -- | -- | -- | -- | .30 | 3 | 25 |
| AUG | | | | | | | | | | |
| 07... | 1000 | -- | 3330 | -- | -- | -- | -- | .20 | 2 | 18 |
| 12... | 1045 | -- | 3190 | -- | -- | -- | -- | <.10 | 2 | 17 |
| 12... | 1050 | -- | 3190 | -- | -- | -- | -- | <.10 | -- | -- |
| 14... | 0900 | -- | 2880 | -- | -- | -- | -- | .20 | 2 | 16 |
| 14... | 0905 | -- | 2880 | -- | -- | -- | -- | .20 | -- | -- |
| 17... | 0945 | -- | 3660 | -- | -- | -- | -- | .20 | 4 | 40 |
| 17... | 0950 | -- | 3660 | -- | -- | -- | -- | .20 | -- | -- |
| 21... | 0830 | -- | 3610 | -- | -- | -- | -- | <.10 | 2 | 19 |
| 26... | 1145 | -- | 2880 | -- | -- | -- | -- | <.10 | 1 | 7.8 |
| 31... | 0930 | -- | 1540 | -- | -- | -- | -- | .30 | 1 | 4.2 |

## 01331095 HUDSON RIVER AT STILLWATER, NY--Continued

### SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MEAN DISCHARGE (CFS) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN DISCHARGE (CFS) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN DISCHARGE (CFS) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) |
|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | |
| 1 | 2910 | 13 | 102 | 4040 | 2 | 22 | 4520 | 1 | 12 |
| 2 | 2210 | 10 | 60 | 2850 | 3 | 23 | 4530 | 1 | 12 |
| 3 | 2950 | 12 | 96 | 2280 | 4 | 25 | 4870 | 1 | 13 |
| 4 | 2540 | 4 | 27 | 3350 | 3 | 27 | 5630 | 1 | 15 |
| 5 | 2250 | 5 | 30 | 3550 | 3 | 29 | 4570 | 1 | 12 |
| 6 | 2140 | 6 | 35 | 3440 | 2 | 19 | 4500 | 1 | 12 |
| 7 | 3240 | 13 | 114 | 3360 | 1 | 9.1 | 2940 | 1 | 7.9 |
| 8 | 3040 | 4 | 33 | 3550 | 3 | 29 | 3880 | 2 | 21 |
| 9 | 2970 | 8 | 64 | 3290 | 2 | 18 | 5270 | 1 | 14 |
| 10 | 3000 | 10 | 81 | 4100 | 3 | 33 | 5210 | 3 | 42 |
| 11 | 3120 | 12 | 101 | 4610 | 3 | 37 | 5360 | 4 | 58 |
| 12 | 2070 | 15 | 84 | 4210 | 2 | 23 | 4290 | 2 | 23 |
| 13 | 1720 | 13 | 60 | 3860 | 2 | 21 | 3930 | 1 | 11 |
| 14 | 2970 | 11 | 88 | 3510 | 3 | 28 | 3430 | 1 | 9.3 |
| 15 | 3080 | 10 | 83 | 3570 | 3 | 29 | 3580 | 9 | 87 |
| 16 | 2550 | 10 | 69 | 2610 | 4 | 28 | 3990 | 6 | 65 |
| 17 | 2730 | 8 | 59 | 2670 | 4 | 29 | 4200 | 2 | 23 |
| 18 | 2990 | 3 | 24 | 3740 | 3 | 30 | 4360 | 1 | 12 |
| 19 | 2180 | 3 | 18 | 3720 | 2 | 20 | 4140 | 3 | 34 |
| 20 | 1870 | 5 | 25 | 3900 | 2 | 21 | 4070 | 2 | 22 |
| 21 | 3170 | 6 | 51 | 3460 | 5 | 47 | 2960 | 1 | 8.0 |
| 22 | 3140 | 3 | 25 | 3510 | 4 | 38 | 2640 | --- | --- |
| 23 | 3330 | 2 | 18 | 2460 | 5 | 33 | 3800 | --- | --- |
| 24 | 3020 | 2 | 16 | 2510 | 2 | 14 | 3700 | --- | --- |
| 25 | 2920 | 2 | 16 | 4840 | 8 | 104 | 2810 | --- | --- |
| 26 | 2740 | 3 | 22 | 4900 | 2 | 26 | 2720 | --- | --- |
| 27 | 4220 | 3 | 34 | 4040 | 3 | 33 | 3460 | --- | --- |
| 28 | 4370 | 3 | 35 | 4020 | 2 | 22 | 2540 | --- | --- |
| 29 | 4340 | 4 | 47 | 4750 | 2 | 26 | 2690 | --- | --- |
| 30 | 4280 | 2 | 23 | 4500 | 1 | 12 | 3760 | --- | --- |
| 31 | 4160 | 2 | 22 | --- | --- | --- | 3930 | --- | --- |
| TOTAL | 92220 | --- | 1562 | 109200 | --- | 855.1 | 122280 | --- | 513.2 |

| DAY | MEAN DISCHARGE (CFS) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN DISCHARGE (CFS) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN DISCHARGE (CFS) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) |
|---|---|---|---|---|---|---|---|---|---|
| | | JANUARY | | | FEBRUARY | | | MARCH | |
| 1 | 2540 | | | 2700 | --- | --- | 12700 | 5 | 171 |
| 2 | 2320 | | | 4000 | --- | --- | 11400 | 15 | 462 |
| 3 | 3340 | | | 5400 | --- | --- | 9470 | 5 | 128 |
| 4 | 2640 | | | 6800 | --- | --- | 8180 | 4 | 88 |
| 5 | 2310 | | | 6400 | --- | --- | 7310 | 5 | 99 |
| 6 | 3280 | | | 5800 | --- | --- | 6420 | --- | --- |
| 7 | 3460 | | | 5200 | --- | --- | 6240 | --- | --- |
| 8 | 3180 | | | 4500 | --- | --- | 5690 | --- | --- |
| 9 | 3500 | | | 3700 | --- | --- | 5260 | --- | --- |
| 10 | 3500 | | | 5400 | --- | --- | 4790 | --- | --- |
| 11 | 3400 | | | 4800 | --- | --- | 4640 | --- | --- |
| 12 | 2300 | | | 9550 | --- | --- | 5210 | --- | --- |
| 13 | 3400 | | | 9550 | --- | --- | 5480 | --- | --- |
| 14 | 3200 | | | 9080 | --- | --- | 5370 | --- | --- |
| 15 | 3400 | | | 8630 | --- | --- | 4290 | --- | --- |
| 16 | 3300 | | | 7520 | 5 | 102 | 4840 | --- | --- |
| 17 | 3100 | | | 8180 | 8 | 177 | 5000 | --- | --- |
| 18 | 2800 | | | 8330 | 10 | 225 | 4900 | --- | --- |
| 19 | 2500 | | | 7810 | 12 | 253 | 4640 | --- | --- |
| 20 | 2800 | | | 10300 | 36 | 1000 | 4690 | --- | --- |
| 21 | 2900 | | | 24200 | 153 | 10000 | 4490 | --- | --- |
| 22 | 2900 | | | 31200 | 118 | 9940 | 4390 | --- | --- |
| 23 | 3000 | | | 25900 | 35 | 2450 | 4390 | --- | --- |
| 24 | 3000 | | | 26600 | 57 | 4090 | 4190 | --- | --- |
| 25 | 2900 | | | 27000 | 41 | 2990 | 4230 | --- | --- |
| 26 | 2630 | | | 26100 | 33 | 2330 | 4100 | --- | --- |
| 27 | 2840 | | | 19300 | 18 | 938 | 4120 | --- | --- |
| 28 | 3430 | | | 15300 | 9 | 372 | 4370 | --- | --- |
| 29 | 3500 | | | --- | --- | --- | 3210 | --- | --- |
| 30 | 3500 | | | --- | --- | --- | 3920 | --- | --- |
| 31 | 3400 | | | --- | --- | --- | 5040 | --- | --- |
| TOTAL | 94270 | | | 389250 | --- | 34867 | 173370 | --- | 948 |

### 01331095 HUDSON RIVER AT STILLWATER, NY--Continued

### SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MEAN DISCHARGE (CFS) | MEAN CONCENTRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN DISCHARGE (CFS) | MEAN CONCENTRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN DISCHARGE (CFS) | MEAN CONCENTRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) |
|---|---|---|---|---|---|---|---|---|---|
| | | APRIL | | | MAY | | | JUNE | |
| 1 | 7590 | --- | --- | 4650 | 5 | 63 | 3680 | 4 | 40 |
| 2 | 9020 | 8 | 195 | 5350 | 4 | 58 | 4100 | 10 | 111 |
| 3 | 10000 | 8 | 216 | 3930 | 3 | 32 | 3800 | 8 | 82 |
| 4 | 9440 | 7 | 178 | 4500 | 5 | 61 | 3390 | 8 | 73 |
| 5 | 8100 | 4 | 87 | 4490 | 5 | 61 | 3330 | 7 | 63 |
| 6 | 9340 | 7 | 177 | 4150 | 3 | 34 | 3230 | 9 | 78 |
| 7 | 10100 | 3 | 82 | 4020 | 4 | 43 | 2910 | 9 | 71 |
| 8 | 9000 | 3 | 73 | 3850 | 5 | 52 | 2370 | 5 | 32 |
| 9 | 8000 | 4 | 86 | 3830 | 6 | 62 | 3250 | 4 | 35 |
| 10 | 7260 | 4 | 78 | 3140 | 4 | 34 | 3440 | 4 | 37 |
| 11 | 6620 | 3 | 54 | 3280 | 23 | 204 | 3570 | 6 | 58 |
| 12 | 5420 | 4 | 59 | 5400 | 30 | 437 | 3160 | 5 | 43 |
| 13 | 5200 | 3 | 42 | 14000 | 27 | 1020 | 3340 | 7 | 63 |
| 14 | 5980 | 8 | 129 | 16600 | 15 | 672 | 2160 | 9 | 52 |
| 15 | 6210 | 5 | 84 | 14700 | 5 | 198 | 2380 | 5 | 32 |
| 16 | 5820 | 4 | 63 | 15400 | 5 | 208 | 3250 | 7 | 61 |
| 17 | 5660 | 4 | 61 | 14900 | 6 | 241 | 3630 | 5 | 49 |
| 18 | 5710 | 3 | 46 | 14000 | 3 | 113 | 3460 | 3 | 28 |
| 19 | 5470 | 5 | 74 | 10100 | 4 | 109 | 3120 | 3 | 25 |
| 20 | 5990 | 6 | 97 | 8350 | 3 | 68 | 3190 | 5 | 43 |
| 21 | 6410 | 3 | 52 | 6860 | 1 | 19 | 2130 | 9 | 52 |
| 22 | 5940 | 3 | 48 | 6190 | 2 | 33 | 2480 | 5 | 33 |
| 23 | 5240 | 3 | 42 | 6010 | 2 | 32 | 3240 | 9 | 79 |
| 24 | 5380 | 3 | 44 | 4620 | 4 | 50 | 3420 | 7 | 65 |
| 25 | 5310 | 2 | 29 | 3610 | 2 | 19 | 3100 | 5 | 42 |
| 26 | 5090 | 2 | 27 | 4240 | 2 | 23 | 3750 | 4 | 40 |
| 27 | 5020 | 3 | 41 | 5430 | 2 | 29 | 3930 | 3 | 32 |
| 28 | 5580 | 4 | 60 | 3370 | 2 | 18 | 2620 | 2 | 14 |
| 29 | 5210 | 3 | 42 | 3800 | 2 | 21 | 2800 | 4 | 30 |
| 30 | 5040 | 3 | 41 | 4220 | 2 | 23 | 3600 | 3 | 29 |
| 31 | --- | --- | --- | 3070 | 3 | 25 | --- | --- | --- |
| TOTAL | 200150 | --- | 2307 | 210060 | --- | 4062 | 95830 | --- | 1492 |

| DAY | MEAN DISCHARGE (CFS) | MEAN CONCENTRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN DISCHARGE (CFS) | MEAN CONCENTRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN DISCHARGE (CFS) | MEAN CONCENTRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) |
|---|---|---|---|---|---|---|---|---|---|
| | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 3170 | 2 | 17 | 3560 | 3 | 29 | 2480 | 1 | 6.7 |
| 2 | 2920 | 1 | 7.9 | 2520 | 3 | 20 | 2840 | 2 | 15 |
| 3 | 2920 | 2 | 16 | 2080 | 3 | 17 | 3170 | 3 | 26 |
| 4 | 2570 | 1 | 6.9 | 2890 | 4 | 31 | 2700 | 2 | 15 |
| 5 | 1620 | 2 | 8.7 | 3080 | 4 | 33 | 2500 | 1 | 6.8 |
| 6 | 2680 | 2 | 14 | 3220 | 5 | 43 | 2050 | 1 | 5.5 |
| 7 | 3870 | 2 | 21 | 3150 | 3 | 26 | 1470 | 1 | 4.0 |
| 8 | 3560 | 4 | 38 | 2700 | 4 | 29 | 2560 | 1 | 6.9 |
| 9 | 3420 | 1 | 9.2 | 2370 | 2 | 13 | 3580 | 1 | 9.7 |
| 10 | 3050 | 2 | 16 | 2640 | 3 | 21 | 4200 | 3 | 34 |
| 11 | 3010 | 2 | 16 | 3470 | 2 | 19 | 4120 | 1 | 11 |
| 12 | 2030 | 1 | 5.5 | 3220 | 3 | 26 | 3940 | 2 | 21 |
| 13 | 1880 | 1 | 5.1 | 3310 | 3 | 27 | 3920 | 1 | 11 |
| 14 | 2400 | 1 | 6.5 | 3180 | 3 | 26 | 3660 | 1 | 9.9 |
| 15 | 3000 | 3 | 24 | 3500 | 3 | 28 | 4100 | 2 | 22 |
| 16 | 2850 | 5 | 38 | 3020 | 3 | 24 | 4160 | 2 | 22 |
| 17 | 2790 | 1 | 7.5 | 3630 | 3 | 29 | 4090 | 2 | 22 |
| 18 | 2500 | 3 | 20 | 4370 | 1 | 12 | 4040 | 2 | 22 |
| 19 | 1970 | 1 | 5.3 | 4230 | 2 | 23 | 3870 | 2 | 21 |
| 20 | 1730 | 3 | 14 | 3960 | 4 | 43 | 2990 | 5 | 40 |
| 21 | 3060 | 2 | 17 | 3540 | 2 | 19 | 2850 | 5 | 38 |
| 22 | 3350 | 3 | 27 | 2920 | 1 | 7.9 | 4070 | 5 | 55 |
| 23 | 3100 | 3 | 25 | 2220 | 1 | 6.0 | 5460 | 5 | 74 |
| 24 | 2870 | 3 | 23 | 2450 | 4 | 26 | 7470 | 5 | 101 |
| 25 | 2800 | 5 | 38 | 2940 | 2 | 16 | 8290 | 4 | 90 |
| 26 | 1870 | 4 | 20 | 2840 | 2 | 15 | 7590 | 5 | 102 |
| 27 | 2050 | 4 | 22 | 2820 | 1 | 7.6 | 7100 | 2 | 38 |
| 28 | 2930 | 4 | 32 | 2570 | 1 | 6.9 | 6560 | 5 | 89 |
| 29 | 3220 | 3 | 26 | 2700 | 1 | 7.3 | 7100 | 8 | 153 |
| 30 | 3900 | 3 | 32 | 2180 | 1 | 5.9 | 6770 | 6 | 110 |
| 31 | 3740 | 3 | 30 | 2020 | 1 | 5.5 | --- | --- | --- |
| TOTAL | 86830 | --- | 588.6 | 93300 | --- | 642.1 | 129700 | --- | 1181.5 |

## 01332500 HOOSIC RIVER NEAR WILLIAMSTOWN, MA

**LOCATION.**--Lat 42°42'01", long 73°09'34", Berkshire County, Hydrologic Unit 02020003, on left bank 0.3 mi (0.5 km) downstream from Sherman Brook and 2.7 mi (4.3 km) east of junction of U.S. Highway 7 and State Highway 2 in Williamstown.

**DRAINAGE AREA.**--126 mi$^2$ (326 km$^2$). Area at site used prior to June 6, 1979, 132 mi$^2$ (342 km$^2$).

**PERIOD OF RECORD.**--Discharge: July 1940 to current year.
Water-quality records: Water years 1953-54, 1957-58, 1967-69.

**GAGE.**--Water-stage recorder and concrete control. Datum of gage is 616.11 ft (187.790 m), Corps of Engineers datum. Prior to June 6, 1979, at site 1.2 mi (1.9 km) downstream at different datum.

**REMARKS.**--Records good except those for winter period, which are fair. Prior to 1966, slight diurnal fluctuation at low flow caused by mills upstream. Some regulation by Cheshire Reservoir 16 mi (26 km) upstream. Several observations of water temperature and specific conductance were made during the year.

**AVERAGE DISCHARGE.**--41 years, 273 ft$^3$/s (7.731 m$^3$/s), 29.42 in/yr (747 mm/yr).

**EXTREMES FOR PERIOD OF RECORD.**--Maximum discharge, 13,000 ft$^3$/s (368 m$^3$/s) Dec. 31, 1948, gage height, 14.85 ft (4.526 m), former site and datum, from rating curve extended above 4,300 ft$^3$/s (120 m$^3$/s) on basis of contracted-opening measurement of peak flow; minimum, 5.8 ft$^3$/s (0.16 m$^3$/s) Aug. 30, 31, Oct. 26, 1940; minimum daily, 24 ft$^3$/s (0.68 m$^3$/s) Sept. 9, 1980.

**EXTREMES FOR CURRENT YEAR.**--Peak discharges above base of 2,400 ft$^3$/s (68 m$^3$/s) and maximum (*):

| Date | Time | Discharge | | Gage height | | Date | Time | Discharge | | Gage height | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (ft$^3$/s) | (m$^3$/s) | (ft) | (m) | | | (ft$^3$/s) | (m$^3$/s) | (ft) | (m) |
| Feb. 11 | 2115 | 3280 | 92.9 | 8.86 | 2.701 | Feb. 20 | 2100 | *5330 | 151 | 10.23 | 3.118 |

Minimum discharge, 25 ft$^3$/s (0.71 m$^3$/s) Oct. 1, 2; minimum daily, 29 ft$^3$/s (0.82 m$^3$/s) Oct. 1, 2.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 29 | 78 | 205 | 72 | 98 | 467 | 514 | 266 | 214 | 92 | 96 | 51 |
| 2 | 29 | 72 | 200 | 80 | 900 | 404 | 755 | 234 | 163 | 86 | 79 | 55 |
| 3 | 37 | 67 | 325 | 64 | 622 | 329 | 461 | 219 | 146 | 82 | 80 | 48 |
| 4 | 102 | 71 | 202 | 58 | 277 | 282 | 366 | 200 | 137 | 86 | 78 | 47 |
| 5 | 74 | 73 | 148 | 58 | 208 | 277 | 448 | 181 | 125 | 234 | 135 | 47 |
| 6 | 52 | 71 | 141 | 60 | 174 | 244 | 548 | 172 | 141 | 404 | 216 | 46 |
| 7 | 47 | 68 | 141 | 64 | 162 | 224 | 379 | 158 | 172 | 209 | 119 | 44 |
| 8 | 39 | 70 | 147 | 72 | 154 | 219 | 311 | 146 | 125 | 146 | 96 | 47 |
| 9 | 39 | 74 | 294 | 72 | 164 | 204 | 294 | 133 | 141 | 114 | 88 | 158 |
| 10 | 36 | 110 | 219 | 64 | 126 | 195 | 366 | 129 | 137 | 92 | 85 | 83 |
| 11 | 40 | 93 | 154 | 58 | 1140 | 185 | 300 | 141 | 121 | 82 | 85 | 65 |
| 12 | 46 | 79 | 135 | 64 | 1590 | 176 | 282 | 619 | 106 | 73 | 88 | 61 |
| 13 | 43 | 73 | 130 | 58 | 595 | 172 | 234 | 448 | 96 | 67 | 73 | 76 |
| 14 | 45 | 73 | 119 | 58 | 418 | 172 | 348 | 311 | 86 | 73 | 66 | 85 |
| 15 | 36 | 72 | 96 | 58 | 336 | 158 | 435 | 260 | 86 | 67 | 65 | 111 |
| 16 | 38 | 67 | 133 | 58 | 297 | 176 | 305 | 277 | 99 | 67 | 167 | 81 |
| 17 | 36 | 60 | 121 | 58 | 396 | 150 | 277 | 244 | 92 | 64 | 109 | 73 |
| 18 | 49 | 73 | 133 | 58 | 513 | 141 | 271 | 214 | 79 | 79 | 88 | 66 |
| 19 | 77 | 76 | 129 | 56 | 689 | 137 | 229 | 195 | 73 | 70 | 77 | 63 |
| 20 | 60 | 73 | 114 | 56 | 2640 | 133 | 214 | 181 | 96 | 96 | 65 | 67 |
| 21 | 54 | 73 | 110 | 56 | 2680 | 125 | 200 | 167 | 114 | 373 | 63 | 63 |
| 22 | 53 | 72 | 105 | 54 | 1330 | 125 | 181 | 154 | 250 | 176 | 61 | 61 |
| 23 | 55 | 67 | 105 | 58 | 819 | 125 | 185 | 141 | 250 | 121 | 61 | 94 |
| 24 | 53 | 123 | 100 | 58 | 1710 | 133 | 441 | 133 | 137 | 99 | 59 | 218 |
| 25 | 116 | 531 | 96 | 58 | 1310 | 141 | 305 | 121 | 300 | 86 | 62 | 153 |
| 26 | 375 | 273 | 94 | 58 | 893 | 146 | 255 | 117 | 348 | 76 | 61 | 102 |
| 27 | 169 | 168 | 92 | 58 | 664 | 185 | 224 | 110 | 214 | 200 | 57 | 99 |
| 28 | 122 | 255 | 90 | 56 | 521 | 181 | 209 | 121 | 154 | 117 | 54 | 207 |
| 29 | 113 | 507 | 96 | 52 | --- | 282 | 234 | 106 | 121 | 193 | 49 | 129 |
| 30 | 97 | 270 | 96 | 52 | --- | 656 | 373 | 117 | 99 | 158 | 49 | 100 |
| 31 | 88 | --- | 79 | 79 | --- | 876 | --- | 341 | --- | 116 | 49 | --- |
| TOTAL | 2249 | 3832 | 4349 | 1885 | 21426 | 7420 | 9944 | 6356 | 4422 | 3998 | 2580 | 2600 |
| MEAN | 72.5 | 128 | 140 | 60.8 | 765 | 239 | 331 | 205 | 147 | 129 | 83.2 | 86.7 |
| MAX | 375 | 531 | 325 | 80 | 2680 | 876 | 755 | 619 | 348 | 404 | 216 | 218 |
| MIN | 29 | 60 | 79 | 52 | 98 | 125 | 181 | 106 | 73 | 64 | 49 | 44 |
| CFSM | .55 | .97 | 1.06 | .46 | 5.80 | 1.81 | 2.51 | 1.55 | 1.11 | .98 | .63 | .66 |
| IN. | .63 | 1.08 | 1.23 | .53 | 6.04 | 2.09 | 2.80 | 1.79 | 1.25 | 1.13 | .73 | .73 |

CAL YR 1980 TOTAL 67090 MEAN 183 MAX 3200 MIN 24 CFSM 1.39 IN 18.91
WTR YR 1981 TOTAL 71061 MEAN 195 MAX 2680 MIN 29 CFSM 1.48 IN 20.03

## 01333000 GREEN RIVER AT WILLIAMSTOWN, MA

LOCATION.--Lat 42°42'32", long 73°11'50", Berkshire County, Hydrologic Unit 02020003, on left bank 0.1 mi (0.2 km) upstream from bridge on State Highway 2 at Williamstown and 0.8 mi (1.3 km) upstream from mouth.

DRAINAGE AREA.--42.6 mi$^2$ (110.3 km$^2$).

PERIOD OF RECORD.--Discharge: September 1949 to current year.
Water-quality records: Water years 1967-69.

GAGE.--Water-stage recorder. Altitude of gage is 615 ft (187 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Slight diurnal fluctuation at times caused by mill upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--32 years, 83.1 ft$^3$/s (2.353 m$^3$/s), 26.49 in/yr (673 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,060 ft$^3$/s (115 m$^3$/s) Dec. 21, 1973, gage height, 5.68 ft (1.731 m) in gage well, from rating curve extended above 750 ft$^3$/s (21 m$^3$/s) on basis of slope-area measurement at gage height 4.94 ft (1.506 m); maximum gage height, 6.35 ft (1.935 m) Mar. 13, 1977, from floodmarks, gage height in well unknown; minimum discharge, 3.1 ft$^3$/s (0.088 m$^3$/s) Sept. 20, 22, 24, 25, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 31, 1948, reached a stage of about 7.5 ft (2.3 m), from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 850 ft$^3$/s (24 m$^3$/s) and maximums (*):

| Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) | Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 11 | -- | 1000 | 28 | a*4.58 | 1.396 | Feb. 20 | 1930 | b*1970 | 55.8 | 4.47 | 1.362 |

a Ice jam.
b From rating curve extended as explained above.

Minimum discharge, 3.6 ft$^3$/s (0.10 m$^3$/s) Nov. 18, result of freezeup.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4.3 | 9.1 | 44 | 15 | 8.5 | 183 | 172 | 86 | 62 | 30 | 19 | 9.6 |
| 2 | 4.4 | 9.0 | 39 | 15 | 300 | 156 | 315 | 86 | 53 | 30 | 17 | 9.5 |
| 3 | 6.5 | 8.4 | 65 | 14 | 163 | 131 | 195 | 81 | 49 | 29 | 16 | 9.0 |
| 4 | 15 | 8.2 | 40 | 12 | 83 | 115 | 161 | 76 | 48 | 28 | 16 | 8.6 |
| 5 | 9.6 | 8.4 | 38 | 10 | 60 | 107 | 186 | 71 | 41 | 48 | 40 | 7.8 |
| 6 | 6.8 | 7.8 | 37 | 10 | 58 | 97 | 189 | 68 | 52 | 42 | 55 | 7.6 |
| 7 | 6.1 | 7.6 | 34 | 12 | 58 | 90 | 151 | 64 | 47 | 33 | 31 | 7.3 |
| 8 | 5.7 | 7.9 | 38 | 13 | 52 | 82 | 133 | 60 | 39 | 28 | 26 | 9.5 |
| 9 | 5.2 | 10 | 56 | 13 | 44 | 79 | 136 | 55 | 46 | 25 | 24 | 41 |
| 10 | 4.9 | 14 | 44 | 12 | 36 | 76 | 133 | 53 | 38 | 23 | 21 | 15 |
| 11 | 5.7 | 10 | 35 | 12 | 370 | 73 | 124 | 55 | 36 | 20 | 21 | 12 |
| 12 | 6.3 | 9.1 | 35 | 10 | 430 | 70 | 115 | 205 | 32 | 18 | 21 | 11 |
| 13 | 5.9 | 8.7 | 35 | 9.7 | 189 | 68 | 103 | 175 | 30 | 18 | 18 | 11 |
| 14 | 5.5 | 8.5 | 31 | 9.4 | 148 | 64 | 131 | 131 | 29 | 17 | 16 | 20 |
| 15 | 5.2 | 8.1 | 31 | 10 | 126 | 62 | 126 | 122 | 29 | 17 | 16 | 20 |
| 16 | 5.1 | 7.7 | 27 | 10 | 118 | 64 | 113 | 124 | 30 | 15 | 39 | 13 |
| 17 | 5.1 | 7.2 | 25 | 11 | 158 | 57 | 107 | 111 | 26 | 14 | 22 | 12 |
| 18 | 9.3 | 6.9 | 26 | 12 | 153 | 52 | 103 | 95 | 23 | 16 | 19 | 11 |
| 19 | 13 | 11 | 26 | 11 | 195 | 52 | 91 | 88 | 21 | 19 | 17 | 14 |
| 20 | 8.0 | 9.4 | 25 | 11 | 791 | 49 | 91 | 79 | 26 | 28 | 15 | 16 |
| 21 | 7.2 | 9.1 | 23 | 10 | 623 | 46 | 88 | 74 | 26 | 82 | 14 | 11 |
| 22 | 6.5 | 9.2 | 22 | 10 | 376 | 43 | 82 | 68 | 93 | 32 | 13 | 11 |
| 23 | 6.1 | 8.5 | 21 | 10 | 265 | 43 | 86 | 62 | 64 | 25 | 13 | 15 |
| 24 | 5.8 | 35 | 20 | 10 | 567 | 46 | 122 | 57 | 41 | 21 | 13 | 54 |
| 25 | 11 | 119 | 19 | 10 | 471 | 47 | 91 | 53 | 97 | 19 | 12 | 38 |
| 26 | 32 | 51 | 18 | 10 | 337 | 48 | 86 | 48 | 70 | 18 | 11 | 29 |
| 27 | 17 | 32 | 17 | 11 | 250 | 60 | 81 | 44 | 55 | 27 | 11 | 27 |
| 28 | 14 | 80 | 17 | 11 | 201 | 57 | 77 | 40 | 46 | 19 | 10 | 61 |
| 29 | 12 | 117 | 19 | 10 | --- | 71 | 86 | 39 | 39 | 30 | 9.5 | 34 |
| 30 | 11 | 61 | 20 | 9.4 | --- | 156 | 103 | 41 | 34 | 26 | 10 | 29 |
| 31 | 9.7 | --- | 17 | 8.8 | --- | 243 | --- | 107 | --- | 21 | 9.7 | --- |
| TOTAL | 269.9 | 698.8 | 944 | 342.3 | 6630.5 | 2587 | 3777 | 2518 | 1322 | 818 | 595.2 | 573.9 |
| MEAN | 8.71 | 23.3 | 30.5 | 11.0 | 237 | 83.5 | 126 | 81.2 | 44.1 | 26.4 | 19.2 | 19.1 |
| MAX | 32 | 119 | 65 | 15 | 791 | 243 | 315 | 205 | 97 | 82 | 55 | 61 |
| MIN | 4.3 | 6.9 | 17 | 8.8 | 8.5 | 43 | 77 | 39 | 21 | 14 | 9.5 | 7.3 |
| CFSM | .20 | .55 | .72 | .26 | 5.56 | 1.96 | 2.96 | 1.91 | 1.04 | .62 | .45 | .45 |
| IN. | .24 | .61 | .82 | .30 | 5.79 | 2.26 | 3.30 | 2.20 | 1.15 | .71 | .52 | .50 |

CAL YR 1980 TOTAL 17831.4 MEAN 48.7 MAX 1090 MIN 3.6 CFSM 1.14 IN 15.57
WTR YR 1981 TOTAL 21076.6 MEAN 57.7 MAX 791 MIN 4.3 CFSM 1.35 IN 18.40

## 01333500 LITTLE HOOSIC RIVER AT PETERSBURG, NY

**LOCATION.**--Lat 42°45'50", long 73°20'16", Rensselaer County, Hydrologic Unit 02020003, on left bank 100 ft (30 m) downstream from highway bridge on dirt road, 1.0 mi (1.6 km) downstream from Petersburg, and 4.9 mi (7.9 km) upstream from mouth.

**DRAINAGE AREA.**--56.1 mi² (145 km²).

**PERIOD OF RECORD.**--July 1951 to current year.

**REVISED RECORDS.**--WSP 1702: 1959.

**GAGE.**--Water-stage recorder. Datum of gage is 587.40 ft (179.039 m) National Geodetic Vertical Datum of 1929.

**REMARKS.**--Records fair except those for winter periods, which are poor.

**AVERAGE DISCHARGE.**--30 years, 93.8 ft³/s (2.656 m³/s), 22.71 in/yr (577 mm/yr).

**EXTREMES FOR PERIOD OF RECORD.**--Maximum discharge, 5,000 ft³/s (142 m³/s) June 30, 1973, gage height, 9.20 ft (2.804 m); minimum, 1.9 ft³/s (0.054 m³/s) Sept. 11, 12, 1964.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Flood of Dec. 31, 1948, reached a stage of 9.4 ft (2.87 m), from floodmarks, discharge, 7,470 ft³/s (212 m³/s), on basis of contracted-opening measurements of peak flow.

**EXTREMES FOR CURRENT YEAR.**--Peak discharges above base of 1,250 ft³/s (35.4 m³/s) and maximum (*):

| Date | Time | Discharge (ft³/s) | Discharge (m³/s) | Gage height (ft) | Gage height (m) | Date | Time | Discharge (ft³/s) | Discharge (m³/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 2 | 1500 | ice jam | | 6.24 | 1.902 | Feb. 20 | 1945 | *1,320 | 37.4 | 5.50 | 1.676 |
| Feb. 11 | 1815 | ice jam | | *6.65 | 2.027 | | | | | | |

Minimum discharge, 5.0 ft³/s (0.14 m³/s) Oct. 2, minimum recorded gage height 1.27 ft (0.387 m) Aug. 4, 5, but may have been less during period of estimated record.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.1 | 10 | 81 | 14 | 11 | 238 | 268 | 87 | 45 | 25 | 20 | 12 |
| 2 | 5.2 | 9.6 | 74 | 14 | 64 | 208 | 421 | 82 | 38 | 24 | 16 | 12 |
| 3 | 6.2 | 9.1 | 109 | 14 | 54 | 173 | 290 | 76 | 35 | 23 | 14 | 11 |
| 4 | 11 | 8.9 | 70 | 13 | 44 | 152 | 238 | 71 | 34 | 22 | 16 | 11 |
| 5 | 9.1 | 8.8 | 56 | 13 | 41 | 136 | 258 | 67 | 30 | 38 | 21 | 11 |
| 6 | 7.4 | 8.5 | 54 | 13 | 38 | 120 | 243 | 64 | 43 | 34 | 36 | 10 |
| 7 | 6.9 | 8.3 | 50 | 13 | 38 | 110 | 201 | 59 | 43 | 26 | 23 | 10 |
| 8 | 6.6 | 8.3 | 47 | 12 | 38 | 102 | 177 | 54 | 33 | 23 | 20 | 12 |
| 9 | 6.2 | 9.2 | 45 | 12 | 38 | 94 | 168 | 50 | 41 | 21 | 19 | 32 |
| 10 | 5.8 | 13 | 42 | 12 | 38 | 87 | 162 | 47 | 35 | 19 | 17 | 20 |
| 11 | 5.9 | 11 | 40 | 11 | 290 | 83 | 149 | 47 | 32 | 18 | 16 | 16 |
| 12 | 6.1 | 10 | 37 | 11 | 180 | 79 | 133 | 184 | 28 | 17 | 16 | 14 |
| 13 | 6.0 | 9.6 | 35 | 11 | 130 | 79 | 115 | 188 | 27 | 17 | 15 | 14 |
| 14 | 5.7 | 9.4 | 33 | 11 | 120 | 75 | 126 | 147 | 25 | 20 | 14 | 15 |
| 15 | 6.0 | 9.1 | 31 | 11 | 120 | 70 | 120 | 146 | 24 | 17 | 15 | 24 |
| 16 | 6.0 | 8.8 | 29 | 11 | 140 | 66 | 105 | 175 | 25 | 15 | 68 | 18 |
| 17 | 6.0 | 9.7 | 28 | 11 | 170 | 68 | 101 | 142 | 22 | 14 | 45 | 15 |
| 18 | 8.3 | 11 | 26 | 11 | 204 | 61 | 98 | 121 | 21 | 14 | 30 | 14 |
| 19 | 12 | 12 | 25 | 11 | 234 | 58 | 87 | 107 | 21 | 15 | 20 | 15 |
| 20 | 9.4 | 9.6 | 24 | 11 | 634 | 56 | 81 | 94 | 23 | 17 | 17 | 16 |
| 21 | 8.5 | 11 | 22 | 11 | 596 | 52 | 73 | 83 | 23 | 76 | 16 | 14 |
| 22 | 8.0 | 9.5 | 21 | 11 | 404 | 50 | 67 | 73 | 32 | 37 | 15 | 16 |
| 23 | 7.6 | 9.3 | 20 | 12 | 321 | 51 | 70 | 65 | 37 | 22 | 14 | 22 |
| 24 | 7.4 | 34 | 19 | 12 | 553 | 55 | 126 | 58 | 27 | 19 | 14 | 98 |
| 25 | 13 | 139 | 19 | 12 | 477 | 60 | 95 | 52 | 64 | 17 | 17 | 67 |
| 26 | 36 | 79 | 18 | 13 | 383 | 66 | 85 | 46 | 64 | 16 | 15 | 46 |
| 27 | 17 | 55 | 17 | 14 | 302 | 95 | 79 | 42 | 48 | 16 | 14 | 38 |
| 28 | 14 | 84 | 16 | 13 | 259 | 94 | 75 | 38 | 38 | 18 | 13 | 54 |
| 29 | 13 | 130 | 15 | 12 | --- | 120 | 88 | 36 | 33 | 36 | 12 | 41 |
| 30 | 11 | 93 | 15 | 11 | --- | 200 | 104 | 41 | 28 | 29 | 12 | 36 |
| 31 | 10 | --- | 15 | 11 | --- | 303 | --- | 70 | --- | 25 | 12 | --- |
| TOTAL | 286.4 | 837.7 | 1133 | 372 | 5921 | 3261 | 4403 | 2612 | 1019 | 730 | 612 | 734 |
| MEAN | 9.24 | 27.9 | 36.5 | 12.0 | 211 | 105 | 147 | 84.3 | 34.0 | 23.5 | 19.7 | 24.5 |
| MAX | 36 | 139 | 109 | 14 | 634 | 303 | 421 | 188 | 64 | 76 | 68 | 98 |
| MIN | 5.1 | 8.3 | 15 | 11 | 11 | 50 | 67 | 36 | 21 | 14 | 12 | 10 |
| CFSM | .17 | .50 | .65 | .21 | 3.76 | 1.87 | 2.62 | 1.50 | .61 | .42 | .35 | .44 |
| IN. | .19 | .56 | .75 | .25 | 3.93 | 2.16 | 2.92 | 1.73 | .68 | .48 | .41 | .49 |

CAL YR 1980 TOTAL 17953.5 MEAN 49.1 MAX 651 MIN 5.1 CFSM .88 IN 11.90
WTR YR 1981 TOTAL 21921.1 MEAN 60.1 MAX 634 MIN 5.1 CFSM 1.07 IN 14.54

## 01334000 WALLOOMSAC RIVER NEAR NORTH BENNINGTON, VT

LOCATION.--Lat 42°54'47", long 73°15'23", Bennington County, Hydrologic Unit 02020003, on left bank 0.6 mi (1.0 km) downstream from Paran Creek and 1.4 mi (2.3 km) south of North Bennington.

DRAINAGE AREA.--111 mi² (287 km²).

PERIOD OF RECORD.--Discharge: June 1931 to current year.
Water-quality records: Water years 1953-54.

REVISED RECORDS.--WSP 781: 1933(M).

GAGE.--Water-stage recorder. Altitude of gage is 525 ft (160 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Occasional diurnal fluctuation at low flow caused by mills upstream; diurnal fluctuation greater prior to 1960. Diversion upstream for municipal supply of Bennington and North Bennington since 1961. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--50 years, 221 ft³/s (6.259 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,450 ft³/s (239 m³/s) Sept. 21, 1938, gage height, 12.04 ft (3.670 m), from rating curve extended above 2,800 ft³/s (79 m³/s) on basis of contracted-opening measurements at gage heights 10.13 ft (3.088 m), 10.49 ft (3.197 m), 11.50 ft (3.505 m), and 12.04 ft (3.670 m) and slope-area measurement and computation of flow over dam at gage height 12.04 ft (3.670 m); minimum, 4 ft³/s (0.1 m³/s) Sept. 27, 1932; minimum daily, 21 ft³/s (0.59 m³/s) Sept. 22, 23, 1964, July 12, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft³/s (57 m³/s) and maximum (*):

| Date | Time | Discharge (ft³/s) | Discharge (m³/s) | Gage height (ft) | Gage height (m) | Date | Time | Discharge (ft³/s) | Discharge (m³/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 11 | 2300 | 2520 | 71.4 | 6.29 | 1.917 | Feb. 20 | 2215 | *4570 | 129 | 8.62 | 2.627 |

Minimum discharge, about 45 ft³/s (1.27 m³/s) Jan. 30, caused by freezeup; minimum daily, 51 ft³/s (1.44 m³/s) Sept. 7.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 60 | 107 | 200 | 82 | 70 | 396 | 491 | 219 | 182 | 75 | 99 | 59 |
| 2 | 60 | 102 | 190 | 80 | 630 | 342 | 876 | 195 | 124 | 72 | 88 | 58 |
| 3 | 81 | 95 | 360 | 70 | 481 | 289 | 483 | 185 | 111 | 72 | 80 | 57 |
| 4 | 206 | 93 | 216 | 64 | 235 | 242 | 379 | 166 | 110 | 73 | 103 | 58 |
| 5 | 149 | 92 | 166 | 62 | 165 | 232 | 531 | 153 | 100 | 164 | 138 | 55 |
| 6 | 102 | 88 | 160 | 62 | 150 | 214 | 625 | 150 | 127 | 340 | 194 | 54 |
| 7 | 88 | 86 | 153 | 66 | 140 | 208 | 400 | 152 | 164 | 156 | 114 | 51 |
| 8 | 83 | 86 | 172 | 70 | 136 | 199 | 327 | 137 | 110 | 108 | 94 | 52 |
| 9 | 76 | 98 | 337 | 70 | 115 | 190 | 298 | 128 | 173 | 87 | 93 | 218 |
| 10 | 72 | 154 | 232 | 68 | 115 | 181 | 318 | 123 | 169 | 79 | 112 | 99 |
| 11 | 74 | 113 | 164 | 60 | 690 | 178 | 288 | 124 | 126 | 72 | 100 | 74 |
| 12 | 79 | 98 | 145 | 60 | 1170 | 173 | 274 | 454 | 105 | 67 | 118 | 67 |
| 13 | 77 | 91 | 164 | 60 | 467 | 169 | 231 | 425 | 97 | 67 | 93 | 66 |
| 14 | 74 | 89 | 130 | 60 | 340 | 165 | 233 | 265 | 92 | 73 | 89 | 99 |
| 15 | 70 | 87 | 120 | 60 | 274 | 151 | 247 | 219 | 92 | 70 | 84 | 111 |
| 16 | 69 | 83 | 133 | 60 | 237 | 160 | 208 | 262 | 90 | 63 | 294 | 82 |
| 17 | 68 | 76 | 115 | 58 | 282 | 141 | 197 | 239 | 83 | 58 | 167 | 70 |
| 18 | 110 | 86 | 130 | 60 | 339 | 127 | 202 | 199 | 76 | 57 | 120 | 64 |
| 19 | 152 | 84 | 115 | 60 | 446 | 122 | 183 | 176 | 71 | 60 | 98 | 66 |
| 20 | 103 | 81 | 110 | 58 | 1900 | 124 | 173 | 163 | 90 | 101 | 87 | 75 |
| 21 | 89 | 81 | 110 | 60 | 2220 | 121 | 163 | 148 | 126 | 479 | 79 | 67 |
| 22 | 84 | 78 | 105 | 62 | 1070 | 116 | 150 | 138 | 100 | 242 | 76 | 71 |
| 23 | 79 | 76 | 105 | 68 | 675 | 115 | 153 | 128 | 95 | 133 | 75 | 134 |
| 24 | 76 | 120 | 100 | 70 | 1140 | 119 | 337 | 121 | 80 | 99 | 86 | 411 |
| 25 | 102 | 540 | 96 | 66 | 1010 | 123 | 279 | 113 | 154 | 87 | 98 | 215 |
| 26 | 432 | 340 | 96 | 62 | 679 | 125 | 246 | 105 | 331 | 81 | 81 | 137 |
| 27 | 206 | 220 | 94 | 62 | 508 | 165 | 205 | 99 | 180 | 193 | 73 | 114 |
| 28 | 154 | 200 | 92 | 60 | 427 | 156 | 183 | 94 | 120 | 120 | 67 | 213 |
| 29 | 137 | 400 | 92 | 58 | --- | 214 | 209 | 92 | 95 | 220 | 64 | 145 |
| 30 | 121 | 270 | 94 | 53 | --- | 508 | 284 | 97 | 84 | 179 | 66 | 114 |
| 31 | 113 | --- | 90 | 60 | --- | 754 | --- | 270 | --- | 119 | 63 | --- |
| TOTAL | 3446 | 4214 | 4586 | 1971 | 16111 | 6519 | 9173 | 5539 | 3657 | 3866 | 3193 | 3156 |
| MEAN | 111 | 140 | 148 | 63.6 | 575 | 210 | 306 | 179 | 122 | 125 | 103 | 105 |
| MAX | 432 | 540 | 360 | 82 | 2220 | 754 | 876 | 454 | 331 | 479 | 294 | 411 |
| MIN | 60 | 76 | 90 | 53 | 70 | 115 | 150 | 92 | 71 | 57 | 63 | 51 |

CAL YR 1980 TOTAL 56631 MEAN 155 MAX 2100 MIN 46
WTR YR 1981 TOTAL 65431 MEAN 179 MAX 2220 MIN 51

## 01334500 HOOSIC RIVER NEAR EAGLE BRIDGE, NY

**LOCATION.**--Lat 42°56'19", long 73°22'39", Rensselaer County, Hydrologic Unit 02020003, on right bank 0.5 mi (0.8 km) upstream from Case Brook, 1.2 mi (1.9 km) downstream from Walloomsac River, and 1.2 mi (1.9 km) southeast of Eagle Bridge.

**DRAINAGE AREA.**--510 mi$^2$ (1,321 km$^2$).

**PERIOD OF RECORD.**--August 1910 to March 1922, July 1923 to current year.

**REVISED RECORDS.**--WSP 741: Drainage area. WSP 756: 1913(m). WSP 1302: 1922(M). WSP 1432: 1913 (minimum gage height). WSP 1502: 1911-12, 1914, 1920-21, 1928(M), 1936(M).

**GAGE.**--Water-stage recorder. Datum of gage is 355.41 ft (108.329 m) National Geodetic Vertical Datum of 1929. Prior to March 1922, nonrecording gage and July 24, 1923 to July 18, 1936, water-stage recorder, at site 0.2 mi (0.3 km) upstream at different datums.

**REMARKS.**--Records fair except those for winter periods, which are poor. Diurnal fluctuation at medium and low flow caused by powerplants above station.

**AVERAGE DISCHARGE.**--69 years (1910-21, 1923-81), 942 ft$^3$/s (26.68 m$^3$/s), 25.08 in/yr (637 mm/yr).

**EXTREMES FOR PERIOD OF RECORD.**--Maximum discharge, 55,400 ft$^3$/s (1,570 m$^3$/s) Dec. 31, 1948, gage height, 21.15 ft (6.447 m), from highwater mark in gage house, from rating curve extended above 13,000 ft$^3$/s (368 m$^3$/s) on basis of peak flow over downstream dams and contracted-opening measurements at gage heights 17.8 ft (5.42 m) and 21.15 ft (6.447 m); minimum, 24 ft$^3$/s (0.68 m$^3$/s) Sept. 14, 1913; minimum daily, 30 ft$^3$/s (0.85 m$^3$/s) Sept. 14, 1913.

**EXTREMES FOR CURRENT YEAR.**--Peak discharges above base of 7,400 ft$^3$/s (210 m$^3$/s) and maximum (*):

| Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) | Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 2 | 1845 | ice jam | | 9.19 | 2.801 | Feb. 21 | 0345 | *15,400 | 436 | 11.77 | 3.588 |
| Feb. 12 | 0145 | ice jam | | *13.35 | 4.069 | | | | | | |

Minimum discharge, 137 ft$^3$/s (3.88 m$^3$/s) Oct. 2.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 143 | 274 | 785 | 210 | 180 | 2260 | 2060 | 1070 | 855 | 348 | 329 | 173 |
| 2 | 140 | 258 | 711 | 210 | 800 | 1990 | 3170 | 946 | 594 | 324 | 287 | 173 |
| 3 | 159 | 242 | 1030 | 210 | 740 | 1690 | 2200 | 908 | 533 | 315 | 260 | 169 |
| 4 | 313 | 234 | 600 | 200 | 640 | 1410 | 1780 | 833 | 504 | 315 | 282 | 165 |
| 5 | 372 | 230 | 540 | 200 | 600 | 1350 | 1840 | 761 | 475 | 487 | 324 | 158 |
| 6 | 258 | 223 | 520 | 190 | 580 | 1240 | 2410 | 733 | 470 | 1010 | 685 | 155 |
| 7 | 219 | 219 | 500 | 190 | 580 | 1160 | 1770 | 712 | 678 | 658 | 458 | 145 |
| 8 | 197 | 219 | 470 | 190 | 580 | 1100 | 1500 | 665 | 498 | 475 | 343 | 148 |
| 9 | 183 | 227 | 440 | 190 | 580 | 1040 | 1360 | 619 | 545 | 384 | 319 | 475 |
| 10 | 173 | 335 | 420 | 180 | 580 | 986 | 1500 | 594 | 626 | 334 | 329 | 353 |
| 11 | 169 | 309 | 400 | 180 | 600 | 954 | 1320 | 581 | 504 | 291 | 315 | 239 |
| 12 | 179 | 258 | 380 | 180 | 3500 | 923 | 1270 | 1680 | 436 | 265 | 343 | 210 |
| 13 | 186 | 238 | 370 | 180 | 3000 | 885 | 1110 | 1930 | 399 | 247 | 291 | 203 |
| 14 | 179 | 215 | 360 | 170 | 2100 | 878 | 1070 | 1350 | 373 | 252 | 265 | 235 |
| 15 | 169 | 212 | 350 | 170 | 1800 | 761 | 1430 | 1170 | 363 | 247 | 247 | 389 |
| 16 | 163 | 212 | 340 | 170 | 1800 | 863 | 1130 | 1330 | 373 | 231 | 527 | 296 |
| 17 | 163 | 197 | 330 | 170 | 1800 | 719 | 1040 | 1180 | 358 | 195 | 481 | 239 |
| 18 | 179 | 215 | 320 | 170 | 1880 | 692 | 1040 | 1030 | 319 | 199 | 348 | 218 |
| 19 | 322 | 223 | 310 | 170 | 2300 | 632 | 954 | 923 | 287 | 239 | 291 | 207 |
| 20 | 262 | 223 | 300 | 170 | 5980 | 665 | 878 | 848 | 282 | 269 | 256 | 239 |
| 21 | 219 | 215 | 280 | 170 | 11000 | 600 | 826 | 775 | 426 | 1110 | 231 | 223 |
| 22 | 204 | 219 | 270 | 170 | 5010 | 594 | 761 | 712 | 368 | 789 | 218 | 210 |
| 23 | 193 | 219 | 260 | 170 | 3280 | 575 | 740 | 652 | 754 | 475 | 210 | 296 |
| 24 | 186 | 258 | 260 | 170 | 5530 | 606 | 1390 | 600 | 453 | 358 | 218 | 915 |
| 25 | 190 | 1570 | 250 | 170 | 5610 | 613 | 1190 | 557 | 515 | 305 | 243 | 804 |
| 26 | 893 | 1100 | 240 | 170 | 4040 | 575 | 1050 | 515 | 1300 | 278 | 218 | 515 |
| 27 | 566 | 676 | 240 | 170 | 3000 | 754 | 939 | 481 | 761 | 431 | 203 | 415 |
| 28 | 406 | 669 | 230 | 170 | 2480 | 797 | 863 | 453 | 569 | 442 | 191 | 639 |
| 29 | 358 | 1730 | 220 | 170 | --- | 833 | 908 | 447 | 458 | 487 | 180 | 563 |
| 30 | 317 | 1060 | 220 | 170 | --- | 1680 | 1250 | 436 | 394 | 569 | 180 | 426 |
| 31 | 291 | --- | 210 | 170 | --- | 2810 | --- | 986 | --- | 404 | 176 | --- |
| TOTAL | 7951 | 12479 | 12156 | 5570 | 70570 | 32635 | 40749 | 26477 | 15470 | 12733 | 9248 | 9595 |
| MEAN | 256 | 416 | 392 | 180 | 2520 | 1053 | 1358 | 854 | 516 | 411 | 298 | 320 |
| MAX | 893 | 1730 | 1030 | 210 | 11000 | 2810 | 3170 | 1930 | 1300 | 1110 | 685 | 915 |
| MIN | 140 | 197 | 210 | 170 | 180 | 575 | 740 | 436 | 282 | 195 | 176 | 145 |
| CFSM | .50 | .82 | .77 | .35 | 4.94 | 2.07 | 2.66 | 1.68 | 1.01 | .81 | .58 | .63 |
| IN. | .58 | .91 | .89 | .41 | 5.15 | 2.38 | 2.97 | 1.93 | 1.13 | .93 | .67 | .70 |

CAL YR 1980 TOTAL 222190 MEAN 607 MAX 10500 MIN 131 CFSM 1.19 IN 16.21
WTR YR 1981 TOTAL 255633 MEAN 700 MAX 11000 MIN 140 CFSM 1.37 IN 18.65

## 01335770 HUDSON RIVER AT WATERFORD, NY

LOCATION.--Lat 42°47'19", long 73°40'28", at Saratoga-Rensselaer County line, Hydrologic Unit 02020003, at bridge on U.S. Highway 4 in Waterford, 0.4 mi (0.6 km) upstream from first branch of Mohawk River, and 2.8 mi (4.5 km) downstream from dam at lock 1 of the Champlain (Barge) Canal.

DRAINAGE AREA.--4,620 mi$^2$ (11,966 km$^2$).

PERIOD OF RECORD.--Water years 1975 to current year.
CHEMICAL DATA: 1975-76 (b), 1977 (c), 1978-79 (d), 1980-81 (e).
MINOR ELEMENTS DATA: 1975-76 (c), 1977-79 (e), 1980-81 (d).
PESTICIDE DATA: 1975 (b), 1976 (d), 1977-79 (e), 1980 (a).
ORGANIC DATA: OC--1975-77 (c), 1978 (d), 1979 (c).
PCB--1975 (b), 1976 (d), 1977-81 (e).
PCN--1977-79 (e), 1980 (a).
NUTRIENT DATA: 1975-76 (c), 1977-78 (e), 1979-81 (d).
BIOLOGICAL DATA:
Bacteria--1977 (c), 1978 (d), 1979 (e), 1980-81 (d).
SEDIMENT DATA: 1975 (b), 1976-77 (e), 1978 (a), 1979 (b), 1980 (c), 1981 (e).

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: October 1976 to current year.

REMARKS.--Water discharge data based on records obtained at site 3.2 mi (5.1 km) upstream. Water-discharge records are fair, except for winter period which are poor because of ice problems. Streamflow affected by regulation for power generation and diversion for canal operations. No sediment data Dec. 24 to Feb. 18 due to ice cover.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT CONCENTRATION: Maximum daily mean, 810 mg/L March 14, 1977; minimum daily mean, 1 mg/L on many days.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 119,000 tons (108,000 Mg) March 14, 1977; minimum daily, 3.9 tons (3.5 Mg) Sept. 7, 1981.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 251 mg/L Feb. 21; minimum daily mean, 1 mg/L on several days in Oct., July, Aug., and Sept.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 24,700 tons (22,400 Mg) Feb. 21; minimum daily, 3.9 tons (3.5 Mg) Sept. 7.

### WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | TIME | STREAMFLOW, INSTANTANEOUS (CFS) | SPECIFIC CONDUCTANCE (UMHOS) | PH (UNITS) | TEMPERATURE (DEG C) | BAROMETRIC PRESSURE (MM OF HG) | OXYGEN, DISSOLVED (MG/L) | OXYGEN, DISSOLVED (PERCENT SATURATION) | OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) | COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) | SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | | |
| 28... | 1500 | 4270 | 153 | 6.9 | 9.0 | 759 | 11.6 | 104 | 25 | 230 | 27 |
| 29... | 1445 | 4470 | 90 | 7.1 | 8.5 | — | — | — | — | — | 10 |
| NOV | | | | | | | | | | | |
| 13... | 0730 | 4510 | 115 | 7.2 | 5.0 | — | — | — | — | — | 13 |
| 19... | 1500 | 3660 | 123 | 7.0 | 3.0 | — | 13.4 | 102 | 70 | 200 | 3 |
| DEC | | | | | | | | | | | |
| 04... | 1300 | 7120 | 129 | 6.8 | 2.1 | 745 | 12.4 | 90 | 24 | 630 | 0 |
| 18... | 0900 | 6480 | 122 | 7.2 | .5 | — | — | — | — | — | — |
| FEB | | | | | | | | | | | |
| 20... | 0745 | 15200 | 178 | 7.1 | — | — | — | — | — | — | — |
| 21... | 2225 | 39500 | 96 | 7.4 | — | — | — | — | — | — | — |
| 22... | 0745 | 38700 | 87 | 7.4 | — | — | — | — | — | — | — |
| 22... | 1330 | 39000 | 78 | 6.9 | — | — | — | — | — | — | — |
| 23... | 1245 | 31200 | 81 | 7.1 | — | — | — | — | — | — | — |
| 25... | 1330 | 38400 | 102 | 7.2 | — | — | — | — | — | — | — |
| 26... | 1500 | 34600 | 94 | 6.2 | 1.5 | 765 | 12.6 | 93 | 65 | 880 | 30 |
| MAR | | | | | | | | | | | |
| 12... | 1300 | 6640 | 145 | 6.5 | 3.5 | 753 | 12.8 | 100 | 26 | 80 | 10 |
| 31... | 1600 | 6920 | 145 | 6.1 | 9.5 | 765 | — | — | — | 5900 | 4 |
| APR | | | | | | | | | | | |
| 29... | 0900 | 5070 | 124 | 8.5 | 11.5 | 752 | 11.1 | 103 | 33 | 4000 | 20 |
| 29... | 1330 | 5420 | 126 | 7.3 | 11.5 | — | — | — | — | — | — |
| MAY | | | | | | | | | | | |
| 13... | 0900 | 14800 | 141 | 6.3 | 15.5 | 762 | 9.7 | 101 | — | K1800 | 31 |
| 29... | 0830 | 3720 | — | — | — | — | — | — | — | — | — |
| JUN | | | | | | | | | | | |
| 05... | 0705 | 3250 | — | — | — | — | — | — | — | — | — |
| 10... | 1100 | 3800 | 181 | 6.4 | 22.0 | 752 | 7.9 | 94 | <10 | 240 | 18 |
| 12... | 0640 | 3420 | — | — | — | — | — | — | — | — | — |
| 17... | 0845 | 3900 | — | — | 22.5 | — | — | — | — | — | — |
| 25... | 0815 | 2610 | — | — | 23.0 | — | — | — | — | — | — |
| JUL | | | | | | | | | | | |
| 08... | 1200 | 3720 | 162 | 6.5 | 26.5 | 762 | 7.5 | 95 | 110 | K320 | 10 |
| 16... | 1000 | 2550 | — | — | — | — | — | — | — | — | — |
| 23... | 1315 | 3450 | — | — | 25.0 | — | — | — | — | — | — |
| 27... | 1100 | 1440 | — | — | 25.0 | — | — | — | — | — | — |
| 29... | 1100 | 3550 | — | — | — | — | — | — | — | — | — |
| AUG | | | | | | | | | | | |
| 04... | 1500 | 3000 | 139 | 6.6 | 25.5 | 762 | 8.0 | 98 | — | K170 | 8 |
| 07... | 1115 | 3190 | 148 | 7.1 | — | — | — | — | — | — | — |
| 12... | 1245 | 2970 | 164 | 7.6 | — | — | — | — | — | — | — |
| 14... | 0730 | 2670 | 132 | 7.3 | 24.0 | — | — | — | — | — | — |
| 17... | 0800 | 3690 | 131 | 7.4 | 24.0 | — | — | — | — | — | — |
| 21... | 0745 | 3450 | 131 | 7.4 | — | — | — | — | — | — | — |
| 26... | 1230 | 2730 | — | 8.0 | 24.5 | — | — | — | — | — | — |
| 31... | 0745 | 1500 | 157 | 7.4 | 23.5 | — | — | — | — | — | — |
| SEP | | | | | | | | | | | |
| 02... | 1430 | 3000 | 181 | 6.4 | 23.0 | 765 | 8.8 | 102 | 76 | 2800 | 14 |

## 01335770 HUDSON RIVER AT WATERFORD, NY—Continued

### WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | SOLIDS, VOLATILE, SUSPENDED (MG/L) | NITROGEN, NO2+NO3 TOTAL (MG/L AS N) | NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) | NITROGEN, TOTAL (MG/L AS N) | PHOSPHORUS, TOTAL (MG/L AS P) | CYANIDE TOTAL (MG/L AS CN) | PCB, TOTAL (UG/L) | SEDIMENT, SUSPENDED (MG/L) | SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) | SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | |
| 28... | — | .43 | .49 | .92 | .050 | .00 | — | — | — | — |
| 29... | 7 | — | — | — | — | — | .20 | 2 | 24 | — |
| NOV | | | | | | | | | | |
| 13... | 6 | — | — | — | — | — | .20 | 3 | 37 | — |
| 19... | — | .53 | .36 | .89 | .030 | .00 | — | — | — | — |
| DEC | | | | | | | | | | |
| 04... | — | .52 | .31 | .83 | .030 | .00 | — | — | — | — |
| 18... | — | — | — | — | — | — | <.10 | 5 | 87 | — |
| FEB | | | | | | | | | | |
| 20... | — | — | — | — | — | — | — | 61 | 2500 | 92 |
| 21... | — | — | — | — | — | — | .20 | 268 | 28600 | — |
| 22... | — | — | — | — | — | — | .60 | 163 | 17000 | — |
| 22... | — | — | — | — | — | — | .60 | 135 | 14200 | — |
| 23... | — | — | — | — | — | — | .30 | 88 | 7410 | 56 |
| 25... | — | — | — | — | — | — | .30 | 42 | 4360 | — |
| 26... | — | .82 | .32 | 1.1 | .020 | <.01 | — | — | — | — |
| MAR | | | | | | | | | | |
| 12... | — | .72 | .44 | 1.2 | .030 | <.01 | — | — | — | — |
| 31... | — | .66 | .70 | 1.4 | .040 | <.01 | — | — | — | — |
| APR | | | | | | | | | | |
| 29... | — | .60 | .60 | 1.2 | .020 | <.01 | — | — | — | — |
| 29... | — | — | — | — | — | — | .10 | 4 | 59 | — |
| MAY | | | | | | | | | | |
| 13... | — | .55 | .73 | 1.3 | .050 | <.01 | — | — | — | — |
| 29... | — | — | — | — | — | — | .20 | 5 | 50 | — |
| JUN | | | | | | | | | | |
| 05... | — | — | — | — | — | — | <.10 | 2 | 18 | — |
| 10... | — | .67 | .52 | 1.2 | .030 | <.01 | — | — | — | — |
| 12... | — | — | — | — | — | — | .10 | — | — | — |
| 17... | — | — | — | — | — | — | <.10 | 5 | 53 | — |
| 25... | — | — | — | — | — | — | .10 | 6 | 42 | — |
| JUL | | | | | | | | | | |
| 08... | — | .56 | .60 | 1.2 | .080 | <.01 | — | — | — | — |
| 16... | — | — | — | — | — | — | .40 | 3 | 21 | — |
| 23... | — | — | — | — | — | — | .20 | 1 | 9.3 | — |
| 27... | — | — | — | — | — | — | .10 | 6 | 23 | — |
| 29... | — | — | — | — | — | — | .30 | 4 | 38 | — |
| AUG | | | | | | | | | | |
| 04... | — | .53 | 4.10 | 4.6 | .080 | <.01 | — | — | — | — |
| 07... | — | — | — | — | — | — | <.10 | 7 | 60 | — |
| 12... | — | — | — | — | — | — | .20 | 7 | 56 | — |
| 14... | — | — | — | — | — | — | .20 | 2 | 14 | — |
| 17... | — | — | — | — | — | — | .10 | 2 | 20 | — |
| 21... | — | — | — | — | — | — | .10 | 2 | 19 | — |
| 26... | — | — | — | — | — | — | <.10 | 2 | 15 | — |
| 31... | — | — | — | — | — | — | .10 | 1 | 4.0 | — |
| SEP | | | | | | | | | | |
| 02... | — | .80 | .68 | 1.5 | .030 | .02 | — | — | — | — |

| DATE | TIME | ARSENIC TOTAL (UG/L AS AS) | CADMIUM TOTAL RECOVERABLE (UG/L AS CD) | CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) | COBALT, TOTAL RECOVERABLE (UG/L AS CO) | COPPER, TOTAL RECOVERABLE (UG/L AS CU) | IRON, TOTAL RECOVERABLE (UG/L AS FE) | LEAD, TOTAL RECOVERABLE (UG/L AS PB) | MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) | MERCURY TOTAL RECOVERABLE (UG/L AS HG) | NICKEL, TOTAL RECOVERABLE (UG/L AS NI) | SILVER, TOTAL RECOVERABLE (UG/L AS AG) | ZINC, TOTAL RECOVERABLE (UG/L AS ZN) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | | | | |
| 28... | 1500 | — | — | — | — | — | — | — | — | — | 1 | 0 | 20 |
| NOV | | | | | | | | | | | | | |
| 19... | 1500 | — | — | — | — | — | — | — | — | — | 11 | 0 | 20 |
| DEC | | | | | | | | | | | | | |
| 04... | 1300 | — | — | — | — | — | — | — | — | — | 5 | 0 | 60 |
| FEB | | | | | | | | | | | | | |
| 26... | 1500 | — | — | — | — | — | — | — | — | — | 1 | 0 | 90 |
| MAR | | | | | | | | | | | | | |
| 12... | 1300 | — | — | — | — | — | — | — | — | — | 0 | 0 | 50 |
| 31... | 1600 | — | — | — | — | — | — | — | — | — | 9 | 0 | 10 |
| APR | | | | | | | | | | | | | |
| 29... | 0900 | — | — | — | — | — | — | — | — | — | 5 | 0 | 20 |
| MAY | | | | | | | | | | | | | |
| 13... | 0900 | — | — | — | — | — | — | — | — | — | 0 | 0 | 40 |
| JUN | | | | | | | | | | | | | |
| 10... | 1100 | — | — | — | — | — | — | — | — | — | 2 | 0 | 10 |
| JUL | | | | | | | | | | | | | |
| 08... | 1200 | — | — | — | — | — | — | — | — | — | 150 | <1 | 30 |
| AUG | | | | | | | | | | | | | |
| 04... | 1500 | — | — | — | — | — | — | — | — | — | <100 | 1 | 30 |
| 07... | 1115 | 2 | 1 | 11 | <1 | 6 | 410 | 6 | 30 | <.1 | 5 | <1 | 10 |
| 12... | 1245 | 3 | 1 | 7 | <1 | 20 | 220 | 110 | 30 | .2 | 4 | <1 | 20 |
| 14... | 0730 | 2 | <1 | 18 | <1 | 6 | 190 | 6 | 20 | .2 | 11 | <1 | 20 |
| 17... | 0800 | 2 | <1 | 18 | <1 | 5 | 220 | 8 | 20 | .2 | 10 | <1 | 10 |
| 21... | 0745 | 3 | 2 | 16 | 2 | 6 | 250 | 18 | 30 | .2 | 2 | — | 20 |
| 26... | 1230 | 1 | 2 | 19 | 1 | 74 | 280 | 12 | 30 | <.1 | 1 | <1 | 10 |
| 31... | 0745 | 1 | 1 | 19 | 3 | 5 | 220 | 8 | 20 | <.1 | 2 | 1 | 10 |
| SEP | | | | | | | | | | | | | |
| 02... | 1430 | — | — | — | — | — | — | — | — | — | <100 | <1 | 20 |

## 01335770 HUDSON RIVER AT WATERFORD, NY--Continued

### SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MEAN DISCHARGE (CFS) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN DISCHARGE (CFS) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN DISCHARGE (CFS) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) |
|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | |
| 1 | 2880 | 3 | 23 | 4270 | 3 | 35 | 5910 | 5 | 80 |
| 2 | 2160 | 5 | 29 | 3210 | 4 | 35 | 5720 | 5 | 77 |
| 3 | 2810 | 5 | 38 | 2450 | 4 | 26 | 6080 | 6 | 98 |
| 4 | 2330 | 3 | 19 | 3650 | 4 | 39 | 7040 | 5 | 95 |
| 5 | 2320 | 3 | 19 | 3940 | 4 | 43 | 5910 | 4 | 64 |
| 6 | 2130 | 3 | 17 | 3760 | 4 | 41 | 5390 | 3 | 44 |
| 7 | 3120 | 2 | 17 | 3760 | 5 | 51 | 4060 | 3 | 33 |
| 8 | 2970 | 3 | 24 | 3890 | 5 | 53 | 4320 | 6 | 70 |
| 9 | 2850 | 3 | 23 | 3480 | 7 | 66 | 6350 | 8 | 137 |
| 10 | 2790 | 4 | 30 | 4460 | 8 | 96 | 6860 | 6 | 111 |
| 11 | 2930 | 4 | 32 | 4980 | 4 | 54 | 9660 | 17 | 443 |
| 12 | 2200 | 4 | 24 | 4630 | 3 | 38 | 5930 | 10 | 160 |
| 13 | 1610 | 3 | 13 | 4380 | 3 | 35 | 5250 | 4 | 57 |
| 14 | 2710 | 3 | 22 | 3870 | 3 | 31 | 5460 | 7 | 103 |
| 15 | 2780 | 3 | 23 | 4030 | 2 | 22 | 5990 | 8 | 129 |
| 16 | 2420 | 2 | 13 | 3150 | 3 | 26 | 5360 | 6 | 87 |
| 17 | 2490 | 2 | 13 | 2880 | 4 | 31 | 5440 | 6 | 88 |
| 18 | 2780 | 2 | 15 | 4020 | 5 | 54 | 5510 | 7 | 104 |
| 19 | 2190 | 1 | 5.9 | 4070 | 6 | 66 | 5140 | 6 | 83 |
| 20 | 1670 | 1 | 4.5 | 4350 | 5 | 59 | 5380 | 6 | 87 |
| 21 | 2930 | 1 | 7.9 | 3870 | 4 | 42 | 3950 | 6 | 64 |
| 22 | 2830 | 1 | 7.6 | 4050 | 4 | 44 | 2990 | 5 | 40 |
| 23 | 3100 | 2 | 17 | 3040 | 3 | 25 | 5200 | 6 | 84 |
| 24 | 2800 | 4 | 30 | 2770 | 5 | 37 | 4870 | --- | --- |
| 25 | 2680 | 4 | 29 | 6080 | 6 | 98 | 4140 | --- | --- |
| 26 | 2900 | 3 | 23 | 6970 | 10 | 188 | 2330 | --- | --- |
| 27 | 4380 | 3 | 35 | 5790 | 9 | 141 | 4090 | --- | --- |
| 28 | 6840 | 3 | 55 | 5340 | 6 | 87 | 3470 | --- | --- |
| 29 | 5870 | 2 | 32 | 6030 | 5 | 81 | 2850 | --- | --- |
| 30 | 5680 | 2 | 31 | 6200 | 4 | 67 | 3940 | --- | --- |
| 31 | 4520 | 2 | 24 | --- | --- | --- | 4050 | --- | --- |
| TOTAL | 94670 | --- | 695.9 | 127370 | --- | 1711 | 158640 | --- | 2338 |

| DAY | MEAN DISCHARGE (CFS) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN DISCHARGE (CFS) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN DISCHARGE (CFS) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) |
|---|---|---|---|---|---|---|---|---|---|
| | | JANUARY | | | FEBRUARY | | | MARCH | |
| 1 | 3520 | | | 3510 | --- | --- | 17200 | 8 | 372 |
| 2 | 2250 | | | 4370 | --- | --- | 14800 | 6 | 240 |
| 3 | 3880 | | | 13800 | --- | --- | 12900 | 5 | 174 |
| 4 | 3230 | | | 9720 | --- | --- | 11500 | 5 | 155 |
| 5 | 2000 | | | 7680 | --- | --- | 10200 | 6 | 165 |
| 6 | 3290 | | | 6480 | --- | --- | 9410 | 5 | 127 |
| 7 | 3410 | | | 6310 | --- | --- | 9300 | 6 | 151 |
| 8 | 3030 | | | 5650 | --- | --- | 8510 | 5 | 115 |
| 9 | 3380 | | | 4750 | --- | --- | 7490 | 5 | 101 |
| 10 | 3500 | | | 6300 | --- | --- | 6700 | 4 | 72 |
| 11 | 2620 | | | 7250 | --- | --- | 6440 | 6 | 104 |
| 12 | 1360 | | | 18300 | --- | --- | 6970 | 5 | 94 |
| 13 | 2560 | | | 11500 | --- | --- | 6970 | 4 | 75 |
| 14 | 3350 | | | 11300 | --- | --- | 6900 | 6 | 112 |
| 15 | 4240 | | | 11300 | --- | --- | 6020 | 5 | 81 |
| 16 | 3050 | | | 10100 | --- | --- | 6020 | 4 | 65 |
| 17 | 3250 | | | 11300 | --- | --- | 6440 | 4 | 70 |
| 18 | 3980 | | | 11700 | --- | --- | 6510 | 4 | 70 |
| 19 | 2120 | | | 12000 | 47 | 1520 | 6180 | 5 | 83 |
| 20 | 2760 | | | 15900 | 86 | 3690 | 5960 | 6 | 97 |
| 21 | 3770 | | | 36500 | 251 | 24700 | 5710 | 4 | 62 |
| 22 | 3480 | | | 39100 | 146 | 15400 | 5830 | 5 | 79 |
| 23 | 3280 | | | 33400 | 84 | 7580 | 5870 | 6 | 95 |
| 24 | 3050 | | | 35500 | 71 | 6810 | 5520 | 6 | 89 |
| 25 | 2630 | | | 37900 | 53 | 5420 | 5590 | 4 | 60 |
| 26 | 1980 | | | 35900 | 38 | 3680 | 5130 | 6 | 83 |
| 27 | 2640 | | | 26900 | 33 | 2400 | 5620 | 4 | 61 |
| 28 | 4280 | | | 20600 | 25 | 1390 | 5830 | 3 | 47 |
| 29 | 4160 | | | --- | --- | --- | 5010 | 3 | 41 |
| 30 | 4120 | | | --- | --- | --- | 5280 | 11 | 157 |
| 31 | 3700 | | | --- | --- | --- | 7460 | 32 | 645 |
| TOTAL | 97870 | | | 455020 | --- | 72590 | 235270 | --- | 3942 |

## 01335770 HUDSON RIVER AT WATERFORD, NY--Continued

### SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MEAN DISCHARGE (CFS) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN DISCHARGE (CFS) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN DISCHARGE (CFS) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) |
|---|---|---|---|---|---|---|---|---|---|
| | | APRIL | | | MAY | | | JUNE | |
| 1 | 10300 | 22 | 612 | 5550 | 7 | 105 | 4430 | 14 | 167 |
| 2 | 12700 | 4 | 137 | 5910 | 8 | 128 | 4580 | 7 | 87 |
| 3 | 13500 | 5 | 182 | 4950 | 8 | 107 | 4510 | 8 | 97 |
| 4 | 12200 | 6 | 198 | 5070 | 8 | 110 | 3760 | 7 | 71 |
| 5 | 10600 | 6 | 172 | 5200 | 6 | 84 | 3580 | 6 | 58 |
| 6 | 12200 | 10 | 329 | 4780 | 4 | 52 | 3480 | 5 | 47 |
| 7 | 12700 | 12 | 411 | 4430 | 5 | 60 | 3620 | 4 | 39 |
| 8 | 11000 | 10 | 297 | 4390 | 4 | 47 | 2840 | 4 | 31 |
| 9 | 9820 | 7 | 186 | 4120 | 3 | 33 | 3690 | 4 | 40 |
| 10 | 8750 | 6 | 142 | 3620 | 7 | 68 | 3800 | 4 | 41 |
| 11 | 8240 | 7 | 156 | 3380 | 29 | 265 | 3660 | 6 | 59 |
| 12 | 6620 | 6 | 107 | 6000 | 34 | 551 | 3420 | 8 | 74 |
| 13 | 5950 | 6 | 96 | 15900 | 44 | 1890 | 3550 | 5 | 48 |
| 14 | 7020 | 6 | 114 | 18700 | 17 | 858 | 2470 | 4 | 27 |
| 15 | 7380 | 6 | 120 | 16600 | 13 | 583 | 2310 | 5 | 31 |
| 16 | 7120 | 5 | 96 | 17400 | 6 | 282 | 3150 | 7 | 60 |
| 17 | 6670 | 4 | 72 | 17100 | 4 | 185 | 3800 | 7 | 72 |
| 18 | 6720 | 3 | 54 | 15600 | 5 | 211 | 3450 | 7 | 65 |
| 19 | 6570 | 3 | 53 | 11200 | 4 | 121 | 3090 | 5 | 42 |
| 20 | 6520 | 8 | 141 | 9570 | 4 | 103 | 3190 | 3 | 26 |
| 21 | 7220 | 7 | 136 | 7960 | 4 | 86 | 2170 | 2 | 12 |
| 22 | 8170 | 6 | 132 | 7170 | 6 | 116 | 2150 | 4 | 23 |
| 23 | 6560 | 5 | 89 | 6720 | 7 | 127 | 3380 | 6 | 55 |
| 24 | 6620 | 5 | 89 | 5290 | 7 | 100 | 3660 | 7 | 69 |
| 25 | 7070 | 5 | 95 | 3900 | 5 | 53 | 3350 | 6 | 54 |
| 26 | 6520 | 4 | 70 | 4240 | 6 | 69 | 4010 | 5 | 54 |
| 27 | 5820 | 4 | 63 | 5730 | 5 | 77 | 4540 | 4 | 49 |
| 28 | 6380 | 4 | 69 | 3870 | 5 | 52 | 3280 | 4 | 35 |
| 29 | 5950 | 4 | 64 | 3900 | 5 | 53 | 2670 | 4 | 29 |
| 30 | 6140 | 4 | 66 | 4390 | 20 | 237 | 3620 | 3 | 29 |
| 31 | --- | --- | --- | 3940 | 27 | 287 | --- | --- | --- |
| TOTAL | 249030 | --- | 4548 | 236580 | --- | 7100 | 103210 | --- | 1591 |

| DAY | MEAN DISCHARGE (CFS) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN DISCHARGE (CFS) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN DISCHARGE (CFS) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) |
|---|---|---|---|---|---|---|---|---|---|
| | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 3250 | 3 | 26 | 3480 | 2 | 19 | 2440 | 1 | 6.6 |
| 2 | 3000 | 3 | 24 | 2760 | 3 | 22 | 2690 | 2 | 15 |
| 3 | 2970 | 3 | 24 | 2050 | 1 | 5.5 | 3180 | 2 | 17 |
| 4 | 2780 | 3 | 23 | 2730 | 3 | 22 | 2900 | 4 | 31 |
| 5 | 1970 | 2 | 11 | 3000 | 5 | 40 | 2510 | 4 | 27 |
| 6 | 2410 | 3 | 20 | 3190 | 3 | 26 | 2220 | 2 | 12 |
| 7 | 4310 | 12 | 140 | 3550 | 4 | 38 | 1430 | 1 | 3.9 |
| 8 | 3760 | 13 | 132 | 2730 | 2 | 15 | 2410 | 2 | 13 |
| 9 | 3450 | 9 | 84 | 2390 | 2 | 13 | 3680 | 2 | 20 |
| 10 | 3000 | 9 | 73 | 2470 | 2 | 13 | 4550 | 2 | 25 |
| 11 | 2910 | 9 | 71 | 3350 | 3 | 27 | 4150 | 1 | 11 |
| 12 | 2180 | 9 | 53 | 3150 | 3 | 26 | 3890 | 2 | 21 |
| 13 | 1630 | 11 | 48 | 3220 | 2 | 17 | 3850 | 2 | 21 |
| 14 | 2390 | 12 | 77 | 3060 | 2 | 17 | 3580 | 3 | 29 |
| 15 | 2730 | 5 | 37 | 3380 | 2 | 18 | 4160 | 4 | 45 |
| 16 | 2500 | 5 | 34 | 3030 | 1 | 8.2 | 4320 | 11 | 128 |
| 17 | 2700 | 6 | 44 | 3690 | 2 | 20 | 4130 | 7 | 78 |
| 18 | 2230 | 6 | 36 | 4470 | 1 | 12 | 4080 | 5 | 55 |
| 19 | 2050 | 5 | 28 | 4120 | 1 | 11 | 3810 | 10 | 103 |
| 20 | 1650 | 1 | 4.5 | 3830 | 1 | 10 | 2920 | 6 | 47 |
| 21 | 3380 | 3 | 27 | 3520 | 1 | 9.5 | 2820 | 5 | 38 |
| 22 | 3940 | 3 | 32 | 2760 | 1 | 7.5 | 3910 | 7 | 74 |
| 23 | 3380 | 2 | 18 | 2230 | 5 | 30 | 5800 | 10 | 157 |
| 24 | 2940 | 2 | 16 | 2360 | 6 | 38 | 7410 | 10 | 200 |
| 25 | 2700 | 1 | 7.3 | 3030 | 6 | 49 | 9380 | 8 | 203 |
| 26 | 2000 | 1 | 5.4 | 2730 | 4 | 29 | 8170 | 8 | 176 |
| 27 | 1850 | 3 | 15 | 2720 | 4 | 29 | 7680 | 10 | 207 |
| 28 | 3090 | 1 | 8.3 | 2460 | 4 | 27 | 6700 | 4 | 72 |
| 29 | 3450 | 2 | 19 | 2600 | 3 | 21 | 7450 | 4 | 80 |
| 30 | 3760 | 1 | 10 | 2390 | 2 | 13 | 7090 | 3 | 57 |
| 31 | 3690 | 1 | 10 | 1970 | 3 | 16 | --- | --- | --- |
| TOTAL | 88050 | --- | 1157.5 | 92420 | --- | 648.7 | 133310 | --- | 1972.5 |

## 01336000 MOHAWK RIVER BELOW DELTA DAM, NEAR ROME, NY

LOCATION.--Lat 43°15'52", long 75°26'12", Oneida County, Hydrologic Unit 02020004, on right bank at Rome Fish Hatchery, 1.0 mi (1.6 km) downstream from Delta Dam, and 4.0 mi (6.4 km) north of Rome.

DRAINAGE AREA.--150 mi$^2$ (389 km$^2$).

PERIOD OF RECORD.--July 1921 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 851: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 474.00 ft (144.475 m) Barge Canal datum. Prior to Jan. 24, 1937, nonrecording gage at site 200 ft (61 m) downstream at same datum.

REMARKS.--Records good. During canal navigation season, water is diverted from Black River through Forestport feeder and Black River Canal (flowing south) into basin above Delta Reservoir. Flow regulated by Delta Reservoir (usable capacity, 2,800 mil ft$^3$ or 79.0 hm$^3$) except for Apr. 24 to May 1, May 18 to 20, Sept. 29 to Sept. 30, when reservoir spilled. Small quantity of water diverted from Delta Reservoir for fish hatchery use and later returned to river, part above and part below station.

AVERAGE DISCHARGE.--60 years, 377 ft$^3$/s (10.68 m$^3$/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,560 ft$^3$/s (242 m$^3$/s) Oct. 2, 1945, gage height, 11.18 ft (3.408 m); minimum, 24 ft$^3$/s (0.68 m$^3$/s) July 30, 1980, gage height, 0.67 ft (0.204 m); minimum daily, 45 ft$^3$/s (1.27 m$^3$/s) Jan. 17, 1931.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 953 ft$^3$/s (27.0 m$^3$/s) Nov. 12, gage height, 3.86 ft (1.176 m); minimum, 43 ft$^3$/s (1.22 m$^3$/s) Nov. 19, gage height, 0.94 ft (0.286 m); minimum daily, 130 ft$^3$/s (3.68 m$^3$/s) Nov. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 277 | 417 | 156 | 217 | 173 | 404 | 321 | 260 | 234 | 229 | 229 | 221 |
| 2 | 277 | 417 | 185 | 216 | 175 | 401 | 331 | 260 | 234 | 226 | 226 | 221 |
| 3 | 277 | 414 | 214 | 216 | 181 | 399 | 316 | 260 | 234 | 226 | 226 | 265 |
| 4 | 277 | 414 | 178 | 216 | 183 | 397 | 313 | 260 | 234 | 226 | 226 | 234 |
| 5 | 274 | 416 | 176 | 216 | 183 | 396 | 313 | 260 | 234 | 226 | 229 | 226 |
| 6 | 274 | 470 | 174 | 214 | 180 | 395 | 313 | 260 | 236 | 229 | 229 | 226 |
| 7 | 274 | 586 | 174 | 214 | 179 | 396 | 312 | 258 | 237 | 229 | 226 | 234 |
| 8 | 254 | 680 | 188 | 206 | 179 | 396 | 310 | 256 | 236 | 229 | 226 | 289 |
| 9 | 232 | 676 | 505 | 200 | 181 | 396 | 308 | 256 | 235 | 229 | 226 | 268 |
| 10 | 210 | 677 | 612 | 200 | 180 | 396 | 311 | 256 | 235 | 226 | 226 | 245 |
| 11 | 200 | 670 | 602 | 198 | 181 | 400 | 312 | 254 | 234 | 226 | 229 | 251 |
| 12 | 199 | 796 | 617 | 199 | 194 | 400 | 312 | 254 | 237 | 226 | 229 | 240 |
| 13 | 197 | 942 | 621 | 198 | 197 | 401 | 294 | 254 | 240 | 226 | 226 | 234 |
| 14 | 197 | 936 | 406 | 198 | 192 | 400 | 293 | 254 | 240 | 226 | 226 | 234 |
| 15 | 196 | 927 | 214 | 198 | 189 | 400 | 275 | 255 | 239 | 224 | 229 | 234 |
| 16 | 197 | 917 | 213 | 197 | 189 | 400 | 265 | 274 | 240 | 224 | 234 | 232 |
| 17 | 176 | 909 | 211 | 186 | 194 | 396 | 268 | 322 | 251 | 224 | 232 | 234 |
| 18 | 157 | 899 | 211 | 177 | 206 | 396 | 290 | 321 | 240 | 221 | 229 | 242 |
| 19 | 157 | 740 | 211 | 177 | 239 | 396 | 270 | 288 | 234 | 221 | 226 | 234 |
| 20 | 158 | 869 | 210 | 177 | 386 | 396 | 275 | 264 | 234 | 221 | 226 | 234 |
| 21 | 159 | 637 | 214 | 177 | 282 | 396 | 275 | 259 | 234 | 221 | 224 | 234 |
| 22 | 158 | 530 | 219 | 175 | 253 | 396 | 264 | 260 | 234 | 221 | 224 | 329 |
| 23 | 157 | 526 | 219 | 174 | 239 | 396 | 265 | 259 | 232 | 221 | 224 | 274 |
| 24 | 157 | 265 | 219 | 175 | 243 | 396 | 303 | 242 | 232 | 221 | 224 | 271 |
| 25 | 162 | 151 | 219 | 175 | 225 | 396 | 338 | 235 | 232 | 262 | 224 | 248 |
| 26 | 236 | 135 | 218 | 174 | 219 | 396 | 328 | 234 | 232 | 237 | 224 | 245 |
| 27 | 185 | 130 | 218 | 174 | 215 | 396 | 330 | 234 | 229 | 234 | 224 | 248 |
| 28 | 177 | 146 | 216 | 174 | 302 | 396 | 300 | 234 | 229 | 232 | 221 | 286 |
| 29 | 321 | 148 | 216 | 175 | --- | 396 | 290 | 234 | 229 | 232 | 221 | 339 |
| 30 | 421 | 137 | 220 | 176 | --- | 367 | 330 | 234 | 229 | 232 | 221 | 323 |
| 31 | 419 | --- | 219 | 174 | --- | 328 | --- | 234 | --- | 232 | 221 | --- |
| TOTAL | 7012 | 16577 | 8475 | 5943 | 5939 | 12220 | 9025 | 7985 | 7050 | 7059 | 7007 | 7595 |
| MEAN | 226 | 553 | 273 | 192 | 212 | 394 | 301 | 258 | 235 | 228 | 226 | 253 |
| MAX | 421 | 942 | 621 | 217 | 386 | 404 | 338 | 322 | 251 | 262 | 234 | 339 |
| MIN | 157 | 130 | 156 | 174 | 173 | 328 | 264 | 234 | 229 | 221 | 221 | 221 |

CAL YR 1980 TOTAL 122703 MEAN 335 MAX 3820 MIN 127
WTR YR 1981 TOTAL 101887 MEAN 279 MAX 942 MIN 130

## 01346000 WEST CANADA CREEK AT KAST BRIDGE, NY

LOCATION.--Lat 43°04'08", long 74°59'26", Herkimer County, Hydrologic Unit 02020004, on left bank 600 ft (183 m) downstream from bridge on old State Highway 28 at Kast Bridge, 1.2 mi (1.9 km) downstream from North Creek, 2.2 mi (3.5 km) north of Herkimer, and 4.0 mi (6.4 km) upstream from mouth.

DRAINAGE AREA.--556 $mi^2$ (1,440 $km^2$).

PERIOD OF RECORD.--May 1905 to December 1906 (gage height and discharge measurements only), January 1907, April to December 1907, March 1908 to December 1909, April 1910 to December 1913, April to December 1914, April 1915 to January 1917, April to November 1917, April to June 1918, October 1920 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 438.99 ft (133.804 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 18, 1920, nonrecording gage at former highway bridge 500 ft (152 m) upstream at different datum.

REMARKS.--Records fair, except for winter periods, which are poor. Since March 1914, flow regulated by Hinckley Reservoir, 31 mi (50 km) above station (usable capacity, 3,320 mil $ft^3$ or 94.0 $hm^3$). Diurnal fluctuation at low and medium flow caused by powerplants above station. Diversion at Trenton Falls, 26 mi (42 km) above station, by Ninemile feeder since 1915 during canal navigation season. Diversion from Hinckley Reservoir for Utica water supply returned to Mohawk River.

AVERAGE DISCHARGE.--61 years (1920-81), 1,316 $ft^3/s$ (37.27 $m^3/s$), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,300 $ft^3/s$ (660 $m^3/s$) Mar. 26, 1913, from reports of State Engineer and Surveyor; maximum gage height, 10.47 ft (3.191 m) probably Feb. 17, 1943, from floodmark in gage well (ice jam); minimum discharge, 20 $ft^3/s$ (0.57 $m^3/s$) Sept. 3, 1929, gage height, 0.90 ft (0.274 m); minimum daily, 59 $ft^3/s$ (1.67 $m^3/s$) Sept. 2, 1929.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,760 $ft^3/s$ (276 $m^3/s$) Feb. 25, gage height, 5.94 ft (1.810 m); maximum gage height, 6.35 ft (1.935 m) Feb. 11 (ice jam); minimum discharge, 205 $ft^3/s$ (5.81 $m^3/s$) July 12, gage height, 1.78 ft (0.542 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 762 | 976 | 1340 | 1180 | 655 | 2660 | 1480 | 1400 | 772 | 569 | 390 | 608 |
| 2 | 540 | 916 | 1670 | 946 | 854 | 2420 | 2050 | 1410 | 772 | 588 | 369 | 522 |
| 3 | 716 | 880 | 2720 | 1210 | 1050 | 2280 | 1540 | 1370 | 830 | 395 | 506 | 1370 |
| 4 | 612 | 912 | 1380 | 939 | 1080 | 2180 | 1690 | 1350 | 691 | 447 | 548 | 1110 |
| 5 | 473 | 959 | 984 | 633 | 1030 | 2160 | 1690 | 1390 | 759 | 402 | 615 | 576 |
| 6 | 694 | 1040 | 1240 | 370 | 907 | 2110 | 1680 | 1280 | 521 | 702 | 658 | 485 |
| 7 | 594 | 1200 | 1410 | 533 | 1020 | 2010 | 1620 | 1320 | 474 | 643 | 592 | 559 |
| 8 | 438 | 1470 | 1620 | 458 | 946 | 1960 | 1590 | 1360 | 604 | 558 | 479 | 885 |
| 9 | 651 | 1560 | 2360 | 436 | 866 | 2010 | 1610 | 1100 | 707 | 442 | 467 | 1550 |
| 10 | 651 | 1420 | 2010 | 550 | 869 | 2000 | 1710 | 1100 | 641 | 509 | 555 | 809 |
| 11 | 576 | 1230 | 1560 | 700 | 1200 | 2000 | 1630 | 1270 | 631 | 367 | 419 | 970 |
| 12 | 413 | 1170 | 1290 | 800 | 2000 | 1980 | 1660 | 1450 | 615 | 255 | 647 | 690 |
| 13 | 594 | 929 | 1670 | 900 | 1400 | 1860 | 1580 | 1350 | 624 | 645 | 549 | 493 |
| 14 | 739 | 1060 | 1070 | 900 | 1200 | 1850 | 2020 | 1040 | 599 | 589 | 420 | 670 |
| 15 | 728 | 1020 | 984 | 700 | 1100 | 1790 | 2480 | 1070 | 657 | 483 | 437 | 846 |
| 16 | 576 | 858 | 1170 | 1200 | 1200 | 1790 | 2030 | 1460 | 651 | 473 | 921 | 710 |
| 17 | 621 | 795 | 1400 | 1100 | 1600 | 1620 | 2100 | 1130 | 1200 | 451 | 776 | 705 |
| 18 | 728 | 898 | 1110 | 1000 | 2500 | 1430 | 3470 | 1020 | 659 | 343 | 579 | 856 |
| 19 | 612 | 932 | 810 | 1400 | 3300 | 1500 | 4020 | 1150 | 578 | 288 | 537 | 702 |
| 20 | 834 | 922 | 1110 | 1500 | 6000 | 1420 | 3150 | 1030 | 512 | 547 | 525 | 605 |
| 21 | 884 | 786 | 997 | 1100 | 5000 | 1230 | 2410 | 988 | 371 | 737 | 512 | 678 |
| 22 | 752 | 947 | 672 | 1100 | 3460 | 1330 | 2020 | 858 | 569 | 545 | 392 | 3180 |
| 23 | 654 | 935 | 594 | 1500 | 4800 | 1350 | 1910 | 910 | 578 | 462 | 340 | 2200 |
| 24 | 720 | 1590 | 923 | 1400 | 9100 | 1460 | 1920 | 820 | 526 | 291 | 518 | 2180 |
| 25 | 1090 | 1890 | 1060 | 1100 | 8980 | 1220 | 1710 | 965 | 603 | 520 | 513 | 1220 |
| 26 | 2470 | 1270 | 1160 | 1610 | 6380 | 1240 | 1720 | 893 | 616 | 383 | 554 | 1060 |
| 27 | 1550 | 1100 | 1070 | 1680 | 4140 | 1050 | 1640 | 849 | 466 | 701 | 519 | 960 |
| 28 | 1120 | 1450 | 1060 | 1240 | 3070 | 1030 | 1610 | 873 | 358 | 479 | 523 | 1480 |
| 29 | 950 | 1540 | 1030 | 1190 | --- | 954 | 1660 | 920 | 575 | 966 | 440 | 1140 |
| 30 | 962 | 1190 | 1510 | 1060 | --- | 1310 | 1690 | 832 | 548 | 623 | 339 | 1010 |
| 31 | 922 | --- | 1170 | 647 | --- | 1830 | --- | 760 | --- | 525 | 469 | --- |
| TOTAL | 24626 | 33845 | 40154 | 31082 | 75707 | 53034 | 59090 | 34718 | 18707 | 15928 | 16108 | 30829 |
| MEAN | 794 | 1128 | 1295 | 1003 | 2704 | 1711 | 1970 | 1120 | 624 | 514 | 520 | 1028 |
| MAX | 2470 | 1890 | 2720 | 1680 | 9100 | 2660 | 4020 | 1460 | 1200 | 966 | 921 | 3180 |
| MIN | 413 | 786 | 594 | 370 | 655 | 954 | 1480 | 760 | 358 | 255 | 339 | 485 |

CAL YR 1980 TOTAL 410799 MEAN 1122 MAX 8630 MIN 367
WTR YR 1981 TOTAL 433828 MEAN 1189 MAX 9100 MIN 255

## 01347000 MOHAWK RIVER NEAR LITTLE FALLS, NY

LOCATION.--Lat 43°00'52", long 74°46'48", Herkimer County, Hydrologic Unit 02020004, on left bank 1,800 ft (549 m) downstream from Rocky Rift Dam, 2.1 mi (3.4 km) upstream from East Canada Creek, and 4.5 mi (7.2 km) southeast of city of Little Falls.

DRAINAGE AREA.--1,348 $mi^2$ (3,491 $km^2$).

PERIOD OF RECORD.--October 1927 to current year.

REVISED RECORDS.--WSP 741: 1929(M), Drainage area. WSP 1302: 1901, 1932(M). WSP 1432: 1928-30.

GAGE.--Water-stage recorder. Datum of gage is 308.84 ft (94.134 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records fair except those for winter periods, which are poor. Records of daily discharge do not include diversion at Rocky Rift Dam into Erie (Barge) Canal for lockages at lock 16, near St. Johnsville. Monthly and annual figures of diversion at Rocky Rift Dam are published separately below. During canal navigation season, water is received from Black River basin through Black River Canal flowing south, and from Chenango River basin through Oriskany Creek feeder. Water is diverted into (or may occasionally be received from) Oswego River basin through summit level of Erie (Barge) Canal between New London and Utica. Diurnal fluctation caused by powerplants and locks and dams on Erie (Barge) Canal. Regulation by Delta and Hinckley Reservoirs (combined usable capacity, 6,120 mil $ft^3$ or 173 $hm^3$) (see Reservoirs in Hudson River Basin).

COOPERATION.--Figures of diversions at Rocky Rift Dam into Erie (Barge) Canal furnished by New York State Department of Transportation.

AVERAGE DISCHARGE.--54 years, 2,792 $ft^3/s$ (79.07 $m^3/s$).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge (river channel only), 33,100 $ft^3/s$ (937 $m^3/s$) Mar. 14, 1977, gage height, 19.17 ft (5.843 m), from high-water mark in gage house; minimum (river channel only), 214 $ft^3/s$ (6.06 $m^3/s$) Aug. 18, 1949, gage height, 3.75 ft (1.43 m); minimum daily (including canal), probably not less than 463 $ft^3/s$ (13.1 $m^3/s$) Sept. 2, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 16,000 $ft^3/s$ (450 $m^3/s$):

| Date | Time | Discharge ($ft^3/s$) | Discharge ($m^3/s$) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|
| Feb. 20 | 2245 | 18,100 | 513 | 14.27 | 4.349 |

Minimum discharge recorded (river channel only), 564 $ft^3/s$ (15.97 $m^3/s$) July 19, gage height, 4.58 ft (1.396 m); minimum daily (river channel only), 683 $ft^3/s$ (19.3 $m^3/s$) Oct. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1080 | 1830 | 2550 | 2000 | 1200 | 4950 | 3210 | 2420 | 1240 | 1100 | 928 | 1020 |
| 2 | 961 | 1720 | 2700 | 1700 | 1500 | 4800 | 4590 | 2290 | 1180 | 1110 | 840 | 1080 |
| 3 | 1110 | 1650 | 4100 | 2000 | 2000 | 4220 | 3940 | 2160 | 1230 | 984 | 850 | 2460 |
| 4 | 1080 | 1710 | 3740 | 1700 | 1900 | 3880 | 3350 | 2070 | 1140 | 964 | 1090 | 3570 |
| 5 | 1040 | 1770 | 2890 | 1200 | 1800 | 3740 | 3030 | 2060 | 1200 | 992 | 1090 | 1800 |
| 6 | 877 | 1850 | 2890 | 1100 | 1600 | 3650 | 3030 | 1900 | 986 | 1280 | 1390 | 1260 |
| 7 | 998 | 2190 | 1840 | 1300 | 1800 | 3480 | 2860 | 1990 | 1030 | 1180 | 1180 | 1200 |
| 8 | 968 | 2730 | 2390 | 1100 | 1700 | 3370 | 2680 | 2000 | 985 | 1080 | 983 | 1330 |
| 9 | 999 | 3150 | 3950 | 1100 | 1600 | 3440 | 2540 | 1710 | 1240 | 898 | 1020 | 3650 |
| 10 | 978 | 3400 | 4940 | 1200 | 1800 | 3430 | 2220 | 1670 | 1270 | 981 | 964 | 2600 |
| 11 | 938 | 2840 | 3830 | 1300 | 3800 | 3430 | 2010 | 1790 | 1170 | 867 | 926 | 2170 |
| 12 | 812 | 2420 | 2880 | 1400 | 6600 | 3410 | 2360 | 2120 | 1120 | 775 | 1160 | 1810 |
| 13 | 683 | 2220 | 2970 | 1500 | 3700 | 3290 | 2230 | 2330 | 1200 | 859 | 1120 | 1330 |
| 14 | 992 | 2410 | 2780 | 1500 | 3000 | 3310 | 1830 | 1860 | 1320 | 1010 | 874 | 1440 |
| 15 | 1010 | 2360 | 2050 | 1300 | 2500 | 3180 | 4380 | 1710 | 1460 | 975 | 923 | 1820 |
| 16 | 873 | 2190 | 2070 | 2000 | 2500 | 3150 | 2940 | 2480 | 1720 | 908 | 1640 | 1540 |
| 17 | 867 | 2060 | 2160 | 1800 | 4500 | 3040 | 2910 | 2660 | 3270 | 860 | 1610 | 1380 |
| 18 | 873 | 2150 | 1990 | 1700 | 6200 | 2550 | 4530 | 2380 | 2130 | 793 | 1210 | 1450 |
| 19 | 1130 | 2190 | 2060 | 2200 | 8800 | 2580 | 5920 | 1850 | 1430 | 724 | 1040 | 1460 |
| 20 | 992 | 1990 | 1740 | 2400 | 16200 | 2460 | 4430 | 1800 | 1390 | 829 | 963 | 1310 |
| 21 | 1180 | 2080 | 1800 | 1900 | 14800 | 2320 | 3500 | 1670 | 1260 | 1550 | 920 | 1190 |
| 22 | 1130 | 2010 | 1300 | 1800 | 11600 | 2410 | 2870 | 1430 | 1440 | 1290 | 895 | 7430 |
| 23 | 1030 | 2120 | 1200 | 2400 | 11000 | 2420 | 2680 | 1470 | 1450 | 860 | 793 | 7520 |
| 24 | 964 | 2780 | 1700 | 2300 | 13900 | 2520 | 3410 | 1320 | 1230 | 838 | 762 | 7570 |
| 25 | 2320 | 6010 | 1900 | 1800 | 13100 | 2550 | 3600 | 1440 | 1490 | 792 | 1030 | 5530 |
| 26 | 6300 | 3570 | 2000 | 2500 | 9610 | 2510 | 3310 | 1350 | 2000 | 892 | 972 | 3710 |
| 27 | 3060 | 2600 | 1900 | 2600 | 6980 | 2280 | 2910 | 1340 | 1370 | 1100 | 928 | 2620 |
| 28 | 1840 | 2390 | 1900 | 2000 | 5270 | 2100 | 2600 | 1310 | 1110 | 1100 | 912 | 2970 |
| 29 | 1850 | 3220 | 1800 | 1900 | --- | 2100 | 2560 | 1350 | 1120 | 1530 | 943 | 2970 |
| 30 | 1890 | 3030 | 2400 | 1800 | --- | 2160 | 2770 | 1300 | 1120 | 1370 | 870 | 2460 |
| 31 | 1790 | --- | 2000 | 1200 | --- | 3480 | --- | 1280 | --- | 1080 | 798 | --- |
| TOTAL | 42615 | 74640 | 76420 | 53700 | 160960 | 96210 | 95200 | 56510 | 41301 | 31571 | 31624 | 79650 |
| MEAN | 1375 | 2488 | 2465 | 1732 | 5749 | 3104 | 3173 | 1823 | 1377 | 1018 | 1020 | 2655 |
| MAX | 6300 | 6010 | 4940 | 2600 | 16200 | 4950 | 5920 | 2660 | 3270 | 1550 | 1640 | 7570 |
| MIN | 683 | 1650 | 1200 | 1100 | 1200 | 2100 | 1830 | 1280 | 985 | 724 | 762 | 1020 |
| * | 15.2 | 5.6 | 0.1 | 0 | 0 | 0 | 2.1 | 16.3 | 16.8 | 15.8 | 19.4 | 17.1 |

CAL YR 1980 TOTAL 824697 MEAN 2253 MAX 17800 MIN 683 * 8.7
WTR YR 1981 TOTAL 840401 MEAN 2302 MAX 16200 MIN 683 * 9.0

* Diversion, equivalent in cubic feet per second, at Rocky Rift Dam into Erie (Barge) Canal for lockages at Lock 16.

## 01348000 EAST CANADA CREEK AT EAST CREEK, NY

LOCATION.--Lat 43°01'00", long 74°44'28", Herkimer County, Hydrologic Unit 0202004, on right bank at village of East Creek, 0.2 mi (0.3 km) downstream from Niagara Mohawk Power Corp. Beardslee powerplant, 1.2 mi (1.9 km) upstream from mouth, and 3.5 mi (5.6 km) northwest of St. Johnsville.

DRAINAGE AREA.--291 mi$^2$ (754 km$^2$).

PERIOD OF RECORD.--December 1945 to current year.

GAGE.--Water-stage recorder. Datum of gage is 335.70 ft (102.321 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Extensive diurnal fluctuation and slight regulation caused by powerplants above station. City of Little Falls diverts about 5 ft$^3$/s (0.14 m$^3$/s) for municipal supply.

AVERAGE DISCHARGE.--35 years (1947-81), 680 ft$^3$/s (19.26 m$^3$/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,300 ft$^3$/s (377 m$^3$/s) Mar. 14, 1977, gage height, 7.42 ft (2.262 m); minimum, 0.05 ft$^3$/s (0.001 m$^3$/s) July 9, 1978, gage height 0.47 ft (0.143 m); minimum gage height, 0.44 ft (0.134 m) July 29, 1977; minimum daily, 0.22 ft$^3$/s (0.006 m$^3$/s) July 9, 1978.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 2, 1945, reached a stage of 9.0 ft (2.74 m), from floodmarks (discharge, 24,000 ft$^3$/s or 680 m$^3$/s, from slope-area measurement of peak flow).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,990 ft$^3$/s (283 m$^3$/s) Feb. 21, gage height, 6.70 ft (2.042 m); minimum, 13 ft$^3$/s (0.368 m$^3$/s) Mar. 18-20, June 20; gage height, 0.98 ft (0.299 m); minimum daily, 14 ft$^3$/s (0.396 m$^3$/s) July 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 318 | 604 | 876 | 20 | 122 | 1560 | 2520 | 323 | 209 | 14 | 275 | 272 |
| 2 | 145 | 704 | 876 | 280 | 266 | 1150 | 3980 | 575 | 221 | 154 | 49 | 313 |
| 3 | 97 | 895 | 1420 | 145 | 166 | 886 | 2720 | 166 | 155 | 240 | 272 | 691 |
| 4 | 611 | 487 | 1960 | 166 | 500 | 822 | 1960 | 318 | 166 | 284 | 186 | 894 |
| 5 | 450 | 633 | 914 | 318 | 561 | 649 | 1050 | 386 | 166 | 472 | 461 | 542 |
| 6 | 704 | 745 | 778 | 173 | 520 | 770 | 1360 | 271 | 173 | 158 | 473 | 461 |
| 7 | 170 | 761 | 633 | 92 | 500 | 575 | 876 | 209 | 20 | 46 | 397 | 81 |
| 8 | 135 | 481 | 972 | 237 | 408 | 443 | 1010 | 155 | 237 | 171 | 274 | 326 |
| 9 | 18 | 914 | 1280 | 229 | 437 | 526 | 796 | 18 | 237 | 113 | 273 | 1530 |
| 10 | 59 | 1310 | 1540 | 241 | 443 | 323 | 761 | 338 | 241 | 77 | 378 | 765 |
| 11 | 113 | 1010 | 1010 | 94 | 554 | 343 | 745 | 736 | 253 | 66 | 251 | 841 |
| 12 | 18 | 1000 | 575 | 323 | 696 | 308 | 343 | 604 | 15 | 57 | 71 | 763 |
| 13 | 84 | 554 | 753 | 397 | 778 | 237 | 280 | 1150 | 163 | 94 | 108 | 512 |
| 14 | 105 | 493 | 813 | 225 | 876 | 375 | 202 | 1320 | 110 | 57 | 81 | 598 |
| 15 | 177 | 353 | 358 | 148 | 895 | 298 | 1490 | 1000 | 343 | 43 | 266 | 507 |
| 16 | 173 | 526 | 328 | 233 | 942 | 533 | 1060 | 1940 | 611 | 76 | 1170 | 122 |
| 17 | 229 | 443 | 408 | 271 | 923 | 380 | 867 | 2160 | 1370 | 114 | 1100 | 303 |
| 18 | 249 | 633 | 481 | 75 | 923 | 303 | 1060 | 895 | 933 | 79 | 230 | 377 |
| 19 | 736 | 513 | 437 | 163 | 1170 | 271 | 1750 | 1010 | 570 | 15 | 582 | 375 |
| 20 | 456 | 369 | 187 | 138 | 3130 | 245 | 1280 | 761 | 541 | 312 | 376 | 226 |
| 21 | 672 | 456 | 280 | 145 | 8740 | 262 | 787 | 626 | 553 | 207 | 179 | 394 |
| 22 | 364 | 313 | 328 | 159 | 6550 | 308 | 604 | 303 | 649 | 276 | 16 | 2040 |
| 23 | 375 | 237 | 391 | 166 | 5800 | 294 | 904 | 159 | 590 | 236 | 17 | 3140 |
| 24 | 391 | 664 | 289 | 89 | 5830 | 313 | 952 | 386 | 323 | 207 | 245 | 2350 |
| 25 | 468 | 1510 | 262 | 198 | 4730 | 249 | 876 | 187 | 289 | 17 | 181 | 1750 |
| 26 | 2620 | 1450 | 426 | 128 | 3040 | 308 | 914 | 364 | 712 | 17 | 178 | 1030 |
| 27 | 2380 | 886 | 294 | 119 | 2110 | 533 | 886 | 221 | 469 | 559 | 151 | 600 |
| 28 | 1640 | 736 | 205 | 119 | 1480 | 408 | 728 | 110 | 189 | 822 | 156 | 1340 |
| 29 | 1140 | 858 | 566 | 173 | --- | 462 | 761 | 166 | 370 | 1130 | 188 | 533 |
| 30 | 1080 | 886 | 206 | 237 | --- | 886 | 380 | 105 | 352 | 1210 | 48 | 796 |
| 31 | 952 | --- | 420 | 198 | --- | 3020 | --- | 18 | --- | 724 | 146 | --- |
| TOTAL | 17129 | 21429 | 19902 | 5699 | 53090 | 18040 | 33902 | 16980 | 11230 | 8047 | 8778 | 24472 |
| MEAN | 553 | 714 | 642 | 184 | 1896 | 582 | 1130 | 548 | 374 | 260 | 283 | 816 |
| MAX | 2620 | 1510 | 1960 | 397 | 8740 | 3020 | 3980 | 2160 | 1370 | 1210 | 1170 | 3140 |
| MIN | 18 | 237 | 187 | 20 | 122 | 237 | 202 | 18 | 15 | 14 | 16 | 81 |

CAL YR 1980 TOTAL 198727 MEAN 543 MAX 5000 MIN 11
WTR YR 1981 TOTAL 238733 MEAN 654 MAX 8740 MIN 14

## 01349000 OTSQUAGO CREEK AT FORT PLAIN, NY

LOCATION.--Lat 42°55'46", long 74°37'35", Montgomery County, Hydrologic Unit 02020004, on left bank 25 ft (8 m) downstream from bridge on State Highway 163 in Fort Plain, and 0.5 mi (0.8 km) upstream from mouth.

DRAINAGE AREA.—59.2 mi$^2$ (153 km$^2$).

PERIOD OF RECORD.—October 1949 to current year.

GAGE.—Water-stage recorder. Datum of gage is 302.16 ft (92.098 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1973, at datum 1.00 ft (0.305 m) higher.

REMARKS.—Records fair except for those during winter months which are poor. Occasional diurnal fluctuation at low flow.

AVERAGE DISCHARGE.—32 years, 85.1 ft$^3$/s (2.410 m$^3$/s), 19.52 in.yr (496 mm/yr).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 9,640 ft$^3$/s (273 m$^3$/s) July 3, 1974, gage height, 9.67 ft (2.947 m), from rating curve extended above 6,000 ft$^3$/s (170 m$^3$/s) on basis of slope-area measurement at gage height 9.24 ft (2.816 m); minimum, 0.6 ft$^3$/s (0.017 m$^3$/s) Nov. 30, 1964.

EXTREMES FOR CURRENT YEAR.—Peak discharges above base of 2,000 ft$^3$/s (57 m$^3$/s) and maximum (*):

| Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) | Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 11 | 2030 | 2,380 | 67.4 | 5.98 | 1.823 | Feb. 20 | 1900 | *4,500 | 127 | *7.42 | 2.262 |

Minimum discharge, 4.6 ft$^3$/s (0.13 m$^3$/s) Oct. 7, 10, Aug. 20-24, 28; minimum gage height, 1.12 ft (0.341 m) Oct. 7, 10.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.5 | 19 | 97 | 14 | 9.0 | 123 | 39 | 35 | 21 | 13 | 6.2 | 6.8 |
| 2 | 6.5 | 21 | 102 | 13 | 30 | 100 | 184 | 32 | 12 | 18 | 5.6 | 6.5 |
| 3 | 7.7 | 17 | 260 | 12 | 80 | 62 | 75 | 29 | 11 | 25 | 5.4 | 31 |
| 4 | 7.1 | 16 | 70 | 11 | 80 | 54 | 53 | 23 | 12 | 22 | 5.4 | 25 |
| 5 | 6.8 | 16 | 60 | 10 | 50 | 50 | 49 | 21 | 9.4 | 21 | 7.4 | 12 |
| 6 | 6.2 | 15 | 70 | 9.0 | 50 | 47 | 53 | 16 | 8.4 | 43 | 9.7 | 9.4 |
| 7 | 5.4 | 15 | 80 | 9.0 | 60 | 45 | 40 | 18 | 7.4 | 18 | 7.1 | 8.4 |
| 8 | 5.6 | 19 | 100 | 9.0 | 80 | 53 | 34 | 16 | 6.5 | 12 | 7.4 | 11 |
| 9 | 5.6 | 32 | 210 | 8.8 | 100 | 76 | 32 | 14 | 14 | 9.7 | 7.4 | 56 |
| 10 | 5.4 | 85 | 105 | 8.4 | 200 | 67 | 40 | 12 | 14 | 9.0 | 6.2 | 18 |
| 11 | 5.9 | 49 | 66 | 8.0 | 450 | 56 | 33 | 13 | 11 | 7.7 | 6.2 | 12 |
| 12 | 6.2 | 34 | 62 | 8.0 | 500 | 50 | 32 | 69 | 8.7 | 7.1 | 6.8 | 9.7 |
| 13 | 7.7 | 27 | 58 | 8.0 | 170 | 45 | 27 | 80 | 12 | 7.4 | 6.2 | 8.4 |
| 14 | 7.7 | 26 | 56 | 8.0 | 110 | 40 | 28 | 35 | 40 | 8.4 | 5.6 | 12 |
| 15 | 7.1 | 23 | 52 | 7.6 | 100 | 35 | 32 | 27 | 41 | 7.4 | 6.2 | 21 |
| 16 | 7.1 | 16 | 50 | 7.4 | 107 | 30 | 25 | 100 | 89 | 6.2 | 9.0 | 12 |
| 17 | 7.4 | 11 | 48 | 7.4 | 385 | 25 | 25 | 56 | 86 | 5.1 | 7.1 | 9.4 |
| 18 | 6.8 | 9.0 | 45 | 7.4 | 863 | 22 | 32 | 33 | 35 | 4.8 | 5.9 | 8.7 |
| 19 | 7.7 | 8.0 | 42 | 7.4 | 712 | 21 | 24 | 25 | 25 | 5.6 | 5.4 | 8.7 |
| 20 | 8.4 | 8.0 | 40 | 7.8 | 1720 | 20 | 21 | 20 | 54 | 11 | 4.8 | 8.7 |
| 21 | 9.0 | 12 | 36 | 8.0 | 800 | 21 | 19 | 16 | 95 | 20 | 4.6 | 8.4 |
| 22 | 8.7 | 20 | 33 | 8.0 | 439 | 22 | 17 | 14 | 95 | 17 | 4.8 | 458 |
| 23 | 8.0 | 35 | 30 | 8.0 | 295 | 24 | 19 | 12 | 41 | 8.7 | 5.1 | 322 |
| 24 | 7.7 | 201 | 26 | 8.0 | 461 | 28 | 95 | 10 | 25 | 6.5 | 6.8 | 280 |
| 25 | 23 | 392 | 24 | 8.0 | 226 | 30 | 65 | 9.4 | 146 | 5.9 | 5.9 | 109 |
| 26 | 221 | 100 | 21 | 9.0 | 218 | 29 | 45 | 8.7 | 160 | 6.2 | 5.1 | 60 |
| 27 | 60 | 80 | 21 | 11 | 148 | 30 | 34 | 8.0 | 50 | 9.0 | 4.8 | 85 |
| 28 | 38 | 80 | 20 | 11 | 110 | 27 | 29 | 8.0 | 27 | 7.7 | 4.8 | 196 |
| 29 | 34 | 100 | 19 | 10 | --- | 26 | 36 | 19 | 19 | 18 | 5.1 | 64 |
| 30 | 25 | 121 | 18 | 9.0 | --- | 28 | 53 | 12 | 16 | 11 | 5.4 | 42 |
| 31 | 21 | --- | 16 | 9.0 | --- | 40 | --- | 32 | --- | 7.7 | 6.5 | --- |
| TOTAL | 590.2 | 1607.0 | 1937 | 280.2 | 8553.0 | 1326 | 1290 | 823.1 | 1191.4 | 379.1 | 189.9 | 1919.1 |
| MEAN | 19.0 | 53.6 | 62.5 | 9.04 | 305 | 42.8 | 43.0 | 26.6 | 39.7 | 12.2 | 6.13 | 64.0 |
| MAX | 221 | 392 | 260 | 14 | 1720 | 123 | 184 | 100 | 160 | 43 | 9.7 | 458 |
| MIN | 5.4 | 8.0 | 16 | 7.4 | 9.0 | 20 | 17 | 8.0 | 6.5 | 4.8 | 4.6 | 6.5 |
| CFSM | .32 | .91 | 1.06 | .15 | 5.15 | .72 | .73 | .45 | .67 | .21 | .10 | 1.08 |
| IN. | .37 | 1.01 | 1.22 | .18 | 5.37 | .83 | .81 | .52 | .75 | .24 | .12 | 1.21 |

CAL YR 1980 TOTAL 22746.9 MEAN 62.2 MAX 3500 MIN 4.1 CFSM 1.05 IN 14.29
WTR YR 1981 TOTAL 20086.0 MEAN 55.0 MAX 1720 MIN 4.6 CFSM .93 IN 12.62

## 01350000 SCHOHARIE CREEK AT PRATTSVILLE, NY

**LOCATION.**--Lat 42°19'15", long 74°26'10", Greene County, Hydrologic Unit 02020005, on left bank 100 ft (30 m) upstream from bridge on State Highway 23 in Prattsville, 0.2 mi (0.3 km) upstream from Schoharie Reservoir, 0.2 mi (0.3 km) downstream from Huntersfield, and 1.6 mi (2.6 km) downstream from Batavia Kill.

**DRAINAGE AREA.**—236 mi$^2$ (611 km$^2$).

**PERIOD OF RECORD.**—November 1902 to current year. Monthly discharge only for some periods, published in WSP 1302.

**REVISED RECORDS.**--WSP 351: Drainage area. WSP 1432: 1937-38.

**GAGE.**--Water-stage recorder. Datum of gage is 1,134.98 ft (345.942 m) (revised) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1915, nonrecording gage, and Oct. 1, 1915 to July 17, 1936, water-stage recorder, at old highway bridge 80 ft (24 m) upstream, and July 18, 1936 to July 15, 1954, water-stage recorder at site 0.2 mi (0.3 km) downstream, all at datum 1.56 ft (0.475 m) lower than present datum.

**REMARKS.**--Records good except those for winter periods, which are poor.

**AVERAGE DISCHARGE.**—78 years, 462 ft$^3$/s (13.08 m$^3$/s), 26.58 in/yr (675 mm/yr).

**EXTREMES FOR PERIOD OF RECORD.**—Maximum discharge, 55,200 ft$^3$/s (1,560 m$^3$/s) Oct. 16, 1955, gage height, 19.14 ft (5.834 m), from rating curve extended above 16,000 ft$^3$/s (453 m$^3$/s) on basis of contracted-opening measurement of peak flow; maximum gage height, 19.57 ft (5.965 m) Mar. 5, 1979 (ice jam); minimum daily discharge, 4.8 ft$^3$/s (0.14 m$^3$/s) Sept. 22, 1964.

**EXTREMES FOR CURRENT YEAR.**—Peak discharges above base of 4,400 ft$^3$/s (120 m$^3$/s) and maximum (*):

| Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) | Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 2 | 1600 | 7,590 | 215 | 8.17 | 2.490 | Feb. 24 | 0530 | 6,550 | 185 | 7.65 | 2.332 |
| Feb. 11 | 1800 | ice jam | | 10.76 | 3.280 | May 12 | 0445 | 6,170 | 175 | 7.47 | 2.277 |
| Feb. 20 | 1800 | *23,000 | 651 | *12.63 | 3.850 | | | | | | |

Minimum discharge, 7.0 ft$^3$/s (0.198 m$^3$/s) Oct. 1, 2, gage height, 1.63 ft (0.497 m).

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 7.8 | 45 | 292 | 92 | 110 | 874 | 510 | 368 | 220 | 82 | 61 | 23 |
| 2 | 8.6 | 45 | 270 | 90 | 3400 | 730 | 1360 | 331 | 175 | 159 | 54 | 23 |
| 3 | 9.6 | 40 | 317 | 88 | 1560 | 612 | 912 | 304 | 162 | 772 | 48 | 34 |
| 4 | 13 | 37 | 330 | 84 | 731 | 400 | 716 | 279 | 165 | 683 | 50 | 36 |
| 5 | 14 | 36 | 310 | 80 | 390 | 380 | 709 | 262 | 150 | 1180 | 54 | 30 |
| 6 | 14 | 34 | 290 | 80 | 300 | 340 | 800 | 250 | 138 | 1140 | 48 | 26 |
| 7 | 13 | 33 | 270 | 80 | 370 | 388 | 587 | 239 | 130 | 670 | 41 | 27 |
| 8 | 12 | 32 | 250 | 78 | 180 | 359 | 557 | 216 | 111 | 455 | 41 | 39 |
| 9 | 10 | 34 | 239 | 76 | 230 | 322 | 516 | 202 | 101 | 340 | 38 | 912 |
| 10 | 8.3 | 46 | 213 | 74 | 230 | 304 | 522 | 192 | 94 | 271 | 34 | 336 |
| 11 | 9.2 | 47 | 190 | 72 | 5000 | 296 | 455 | 345 | 94 | 216 | 34 | 202 |
| 12 | 9.7 | 42 | 190 | 72 | 2420 | 279 | 423 | 4350 | 87 | 172 | 33 | 144 |
| 13 | 9.5 | 38 | 180 | 64 | 900 | 220 | 373 | 2290 | 106 | 153 | 34 | 113 |
| 14 | 9.8 | 38 | 170 | 58 | 700 | 210 | 378 | 1310 | 168 | 135 | 30 | 111 |
| 15 | 10 | 40 | 160 | 64 | 600 | 190 | 434 | 1010 | 262 | 119 | 29 | 175 |
| 16 | 10 | 38 | 150 | 72 | 540 | 190 | 368 | 1210 | 471 | 103 | 50 | 150 |
| 17 | 10 | 36 | 140 | 72 | 600 | 180 | 345 | 874 | 287 | 91 | 63 | 135 |
| 18 | 10 | 36 | 140 | 72 | 700 | 180 | 331 | 696 | 195 | 82 | 41 | 119 |
| 19 | 14 | 35 | 130 | 70 | 800 | 170 | 296 | 593 | 156 | 76 | 31 | 111 |
| 20 | 12 | 35 | 130 | 72 | 8240 | 160 | 279 | 516 | 135 | 84 | 27 | 106 |
| 21 | 13 | 37 | 130 | 72 | 4780 | 150 | 254 | 450 | 147 | 188 | 25 | 94 |
| 22 | 13 | 40 | 130 | 72 | 3070 | 140 | 235 | 393 | 182 | 147 | 22 | 96 |
| 23 | 12 | 50 | 130 | 76 | 1900 | 140 | 235 | 345 | 266 | 103 | 23 | 124 |
| 24 | 11 | 140 | 130 | 76 | 4320 | 175 | 296 | 304 | 188 | 82 | 29 | 182 |
| 25 | 40 | 677 | 120 | 76 | 2190 | 185 | 279 | 258 | 162 | 71 | 33 | 213 |
| 26 | 311 | 439 | 120 | 78 | 1530 | 175 | 247 | 227 | 168 | 67 | 27 | 165 |
| 27 | 158 | 283 | 110 | 80 | 1160 | 209 | 227 | 202 | 147 | 96 | 23 | 147 |
| 28 | 101 | 262 | 100 | 80 | 967 | 216 | 213 | 182 | 124 | 106 | 21 | 231 |
| 29 | 81 | 522 | 100 | 80 | --- | 235 | 271 | 192 | 106 | 89 | 22 | 202 |
| 30 | 63 | 382 | 98 | 74 | --- | 345 | 471 | 224 | 91 | 94 | 21 | 162 |
| 31 | 52 | --- | 96 | 74 | --- | 499 | --- | 227 | --- | 73 | 19 | --- |
| TOTAL | 1069.5 | 3599 | 5625 | 2348 | 47918 | 9253 | 13599 | 18841 | 4988 | 8099 | 1106 | 4468 |
| MEAN | 34.5 | 120 | 181 | 75.7 | 1711 | 298 | 453 | 608 | 166 | 261 | 35.7 | 149 |
| MAX | 311 | 677 | 330 | 92 | 8240 | 874 | 1360 | 4350 | 471 | 1180 | 63 | 912 |
| MIN | 7.8 | 32 | 96 | 58 | 110 | 140 | 213 | 182 | 87 | 67 | 19 | 23 |
| CFSM | .15 | .51 | .77 | .32 | 7.25 | 1.26 | 1.92 | 2.58 | .70 | 1.11 | .15 | .63 |
| IN. | .17 | .57 | .89 | .37 | 7.55 | 1.46 | 2.14 | 2.97 | .79 | 1.28 | .17 | .70 |

CAL YR 1980 TOTAL 123925.5 MEAN 339 MAX 13800 MIN 6.0 CFSM 1.44 IN 19.53
WTR YR 1981 TOTAL 120913.5 MEAN 331 MAX 8240 MIN 7.8 CFSM 1.40 IN 19.06

## 01350100 SCHOHARIE RESERVOIR NEAR GRAND GORGE, NY

LOCATION.--Lat 42°21'21", long 74°26'42", Schoharie County, Hydrologic Unit 02020005, in Shandaken Tunnel intake house on Intake Road, 1.6 mi (2.6 km) north of junction of Intake Road and State Highway 23, 2.5 mi (4.0 km) upstream from Gilboa Dam, and 2.6 mi (4.2 km) east of Grand Gorge.

DRAINAGE AREA.--314 $mi^2$ (813 $km^2$).

PERIOD OF RECORD.--January 1973 to current year. Monthly contents only published as "at Gilboa" for September 1928 to December 1972.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).

REMARKS.--Reservoir is formed by masonry and earth dam. Storage began July 24, 1926. Usable capacity 19,583 mil gal (74.12 $hm^3$) between minimum operating level, elevation, 1,050.00 ft (320.040 m), and crest of spillway, elevation, 1,130.00 ft (344.424 m). Dead storage below elevation 1,050.00 (320.040 m), 1,968 mil gal (7.449 $hm^3$). Figures given herein represent usable contents. Reservoir impounds water except for periods of spilling, for diversion through Shandaken Tunnel into Esopus Creek to Ashokan Reservoir, for New York City water supply.

COOPERATION.--Capacity table furnished by Department of Environmental Protection, City of New York.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 1,135.17 ft (346.000 m) Oct. 16, 1955, contents, 23,566 mil gal (89.20 $hm^3$); minimum observed (after initial filling), 1,062.00 ft (323.698 m) Aug. 20, 1970, contents, 1,520 mil gal (5.753 $hm^3$).

EXTREMES FOR CURRENT YEAR.--Maximum observed elevation, 1,131.54 ft (344.893 m) Feb. 21, (0800 hrs), contents, 20,182 mil gal (76.39 $hm^3$); minimum, 1,063.08 ft (324.027 m) Oct. 18, contents, 1,684 mil gal (6.37 $hm^3$).

Capacity table (elevation, in feet, and usable contents in million gallons).

| | | | |
|---|---|---|---|
| 1,063.0 | 1,672 | 1,120.0 | 16,100 |
| 1,080.0 | 4,969 | 1,133.0 | 20,700 |

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1063.26 | 1066.76 | 1075.82 | 1072.36 | 1071.39 | 1130.02 | 1099.73 | 1086.79 | 1106.70 | 1100.66 | 1105.42 | 1090.06 |
| 2 | 1063.28 | 1066.76 | 1075.84 | 1072.25 | 1074.99 | 1129.96 | 1100.21 | 1086.03 | 1106.57 | 1100.55 | 1105.06 | 1089.55 |
| 3 | 1063.30 | 1066.77 | 1075.72 | 1072.17 | 1085.08 | 1129.79 | 1101.28 | 1084.83 | 1106.43 | 1101.15 | 1104.69 | 1089.11 |
| 4 | 1063.37 | 1066.84 | 1075.59 | 1072.05 | 1085.42 | 1129.45 | 1101.23 | 1083.84 | 1106.20 | 1102.67 | 1104.28 | 1088.70 |
| 5 | 1063.34 | 1066.99 | 1075.20 | 1071.99 | 1084.61 | 1129.02 | 1101.20 | 1083.33 | 1105.51 | 1104.28 | 1103.86 | 1088.22 |
| 6 | 1063.34 | 1066.97 | 1074.98 | 1071.72 | 1083.44 | 1128.46 | 1101.54 | 1083.38 | 1104.12 | 1107.01 | 1103.45 | 1087.74 |
| 7 | 1063.33 | 1067.10 | 1074.76 | 1071.66 | 1082.25 | 1127.78 | 1101.76 | 1083.46 | 1102.62 | 1108.73 | 1103.03 | 1087.28 |
| 8 | 1063.27 | 1067.13 | 1074.64 | 1071.62 | 1081.01 | 1127.05 | 1101.86 | 1083.51 | 1101.36 | 1109.57 | 1102.62 | 1087.03 |
| 9 | 1063.26 | 1067.23 | 1074.64 | 1071.60 | 1079.63 | 1126.24 | 1101.71 | 1083.47 | 1100.98 | 1110.11 | 1102.18 | 1087.66 |
| 10 | 1063.13 | 1067.33 | 1074.64 | 1071.58 | 1078.37 | 1125.32 | 1101.35 | 1083.41 | 1100.59 | 1110.31 | 1101.73 | 1088.68 |
| 11 | 1063.14 | 1067.43 | 1074.64 | 1071.50 | 1083.28 | 1124.35 | 1101.00 | 1084.37 | 1100.27 | 1110.47 | 1101.27 | 1088.85 |
| 12 | 1063.17 | 1067.52 | 1074.51 | 1071.42 | 1102.79 | 1123.33 | 1100.56 | 1089.91 | 1099.96 | 1110.52 | 1100.80 | 1088.72 |
| 13 | 1063.18 | 1067.66 | 1074.40 | 1071.37 | 1107.61 | 1122.33 | 1099.71 | 1098.40 | 1099.69 | 1110.45 | 1100.34 | 1088.50 |
| 14 | 1063.16 | 1067.70 | 1074.20 | 1071.29 | 1108.58 | 1121.28 | 1100.52 | 1102.52 | 1099.54 | 1110.34 | 1099.84 | 1088.25 |
| 15 | 1063.15 | 1067.73 | 1073.84 | 1071.25 | 1108.69 | 1120.13 | 1101.67 | 1104.89 | 1099.72 | 1110.16 | 1099.15 | 1088.19 |
| 16 | 1063.13 | 1067.76 | 1073.71 | 1071.23 | 1108.45 | 1119.11 | 1102.22 | 1106.79 | 1100.06 | 1109.99 | 1098.38 | 1088.12 |
| 17 | 1063.14 | 1067.90 | 1073.62 | 1071.22 | 1108.46 | 1117.92 | 1101.67 | 1107.07 | 1100.29 | 1109.74 | 1097.66 | 1087.92 |
| 18 | 1063.17 | 1067.96 | 1073.42 | 1071.21 | 1108.75 | 1116.65 | 1100.77 | 1107.33 | 1100.99 | 1109.29 | 1097.22 | 1087.70 |
| 19 | 1063.27 | 1068.06 | 1073.32 | 1071.20 | 1109.27 | 1115.42 | 1099.76 | 1107.90 | 1101.09 | 1108.88 | 1096.73 | 1087.45 |
| 20 | 1063.20 | 1068.19 | 1073.18 | 1071.19 | 1114.82 | 1114.11 | 1098.69 | 1108.33 | 1101.02 | 1108.69 | 1096.23 | 1087.17 |
| 21 | 1063.19 | 1068.30 | 1073.05 | 1071.18 | 1130.22 | 1112.73 | 1097.53 | 1108.49 | 1101.00 | 1108.25 | 1095.71 | 1086.88 |
| 22 | 1063.20 | 1068.46 | 1072.91 | 1071.18 | 1130.86 | 1111.38 | 1096.31 | 1108.54 | 1101.08 | 1108.21 | 1095.16 | 1086.59 |
| 23 | 1063.18 | 1068.56 | 1072.85 | 1071.19 | 1130.59 | 1110.03 | 1095.10 | 1108.59 | 1101.21 | 1108.03 | 1094.61 | 1086.44 |
| 24 | 1063.14 | 1068.76 | 1072.79 | 1071.20 | 1131.11 | 1108.65 | 1093.96 | 1108.54 | 1101.34 | 1107.76 | 1094.09 | 1086.33 |
| 25 | 1063.53 | 1070.87 | 1072.73 | 1071.21 | 1130.61 | 1107.29 | 1092.87 | 1108.36 | 1101.36 | 1107.45 | 1093.61 | 1086.47 |
| 26 | 1065.21 | 1073.29 | 1072.60 | 1071.22 | 1130.38 | 1105.91 | 1091.81 | 1108.10 | 1101.32 | 1107.14 | 1093.14 | 1086.54 |
| 27 | 1066.07 | 1074.07 | 1072.53 | 1071.24 | 1130.24 | 1104.55 | 1090.62 | 1107.77 | 1101.29 | 1106.92 | 1092.64 | 1086.53 |
| 28 | 1066.51 | 1074.35 | 1072.42 | 1071.25 | 1130.12 | 1103.19 | 1089.33 | 1107.38 | 1101.21 | 1106.81 | 1092.13 | 1086.59 |
| 29 | 1066.73 | 1075.05 | 1072.37 | 1071.27 | --- | 1101.89 | 1088.13 | 1107.00 | 1101.05 | 1106.34 | 1091.62 | 1086.77 |
| 30 | 1066.68 | 1075.66 | 1072.36 | 1071.26 | --- | 1100.88 | 1087.36 | 1106.84 | 1100.84 | 1106.03 | 1091.11 | 1086.80 |
| 31 | 1066.59 | --- | 1072.36 | 1071.25 | --- | 1100.14 | --- | 1106.77 | --- | 1105.73 | 1090.59 | --- |
| MEAN | 1063.83 | 1068.84 | 1073.86 | 1071.46 | 1103.97 | 1117.56 | 1098.05 | 1098.26 | 1101.85 | 1107.49 | 1098.33 | 1087.69 |
| MAX | 1066.73 | 1075.66 | 1075.84 | 1072.36 | 1131.11 | 1130.02 | 1102.22 | 1108.59 | 1106.70 | 1110.52 | 1105.42 | 1090.06 |
| MIN | 1063.13 | 1066.76 | 1072.36 | 1071.18 | 1071.39 | 1100.14 | 1087.36 | 1083.33 | 1099.54 | 1100.55 | 1090.59 | 1086.33 |
| * | 2,245 | 3,957 | 3,301 | 3,101 | 19,634 | 10,142 | 6,767 | 12,018 | 10,323 | 11,724 | 7,585 | 6,607 |
| ** | +26.4 | +88.3 | -32.7 | -9.98 | +914 | -474 | -174 | +262 | -87.4 | +69.9 | -206 | -50.4 |

CAL YR 1980 MEAN 1102.86 MAX 1132.44 MIN 1063.13 * -69.2
WTR YR 1981 MEAN 1090.84 MAX 1131.11 MIN 1063.13 * +20.7

* Contents in millon gallons, on last day of month.
** Change in contents, equivalent in cubic feet per second.

Note.--Elevations for Nov. 9-10, and Jan. 6 to Sept. 22 are based on readings furnished by Department of Environmental Protection, City of New York.

## 01350101 SCHOHARIE CREEK AT GILBOA, NY

LOCATION.--Lat 42°23'50", long 74°27'03", Schoharie County, Hydrologic Unit 02020005, on left bank, 200 ft (61 m) upstream from bridge on County Highway 322, 0.2 mi (0.3 km) west of village of Gilboa, 0.4 mi (0.6 km) downstream from dam on Schoharie Reservoir, and 0.8 mi (1.3 km) upstream from the Platter Kill.

DRAINAGE AREA.--314 mi$^2$ (813 km$^2$).

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 939.56 ft (286.378 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Entire flow, runoff from 314 mi$^2$ (813 km$^2$), except for periods of spill, Feb. 20 to Mar. 3, diverted from Schoharie Reservoir through Shandaken Tunnel into Esopus Creek upstream from Ashokan Reservoir for water supply of city of New York.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,500 ft$^3$/s (1,320 m$^3$/s) Mar. 21, 1980 determined by flow over dam computations at Schoharie Reservoir dam, gage height, 28.6 ft (8.72 m) from floodmarks; minimum daily, 0.04 ft$^3$/s (0.001 m$^3$/s) on many days, June to October 1976, and Sept. 11-13, 1980.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 32,000 ft$^3$/s (906 m$^3$/s) Mar. 18, 1936, from information furnished by Bureau of Water Resources Development, City of New York.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,760 ft$^3$/s (248 m$^3$/s) Feb. 21, gage height, 17.21 ft (5.25 m); minimum daily, 0.08 ft$^3$/s (0.002 m$^3$/s) Oct. 1 and 2.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .08 | .23 | 1.0 | 1.0 | 1.0 | 323 | .36 | .51 | .41 | .20 | .29 | .09 |
| 2 | .08 | .26 | 1.1 | .94 | 6.0 | 132 | .82 | .41 | .33 | .41 | .33 | .10 |
| 3 | .09 | .23 | 1.5 | .90 | 3.0 | 16 | .67 | .36 | .33 | .82 | .33 | .26 |
| 4 | .12 | .23 | 1.3 | .88 | 1.5 | 1.0 | .56 | .33 | .36 | .62 | .33 | .26 |
| 5 | .12 | .26 | 1.1 | .84 | 1.0 | .72 | .51 | .29 | .36 | 1.1 | .36 | .15 |
| 6 | .10 | .29 | 1.0 | .80 | .80 | .72 | .56 | .29 | .36 | .94 | .36 | .12 |
| 7 | .09 | .33 | .94 | .80 | .80 | .67 | .46 | .29 | .36 | .62 | .29 | .10 |
| 8 | .10 | .36 | 1.0 | .80 | .70 | .67 | .41 | .29 | .33 | .51 | .41 | .20 |
| 9 | .10 | .45 | 1.1 | .76 | .70 | .67 | .45 | .26 | .33 | .51 | .36 | .51 |
| 10 | .09 | .56 | 1.2 | .76 | .70 | .67 | .62 | .26 | .33 | .51 | .29 | .23 |
| 11 | .10 | .56 | 1.1 | .70 | 24 | .67 | .51 | .33 | .41 | .41 | .26 | .15 |
| 12 | .10 | .51 | 1.1 | .70 | 6.4 | .62 | .51 | 4.9 | .33 | .45 | .26 | .10 |
| 13 | .10 | .51 | 1.1 | .70 | 1.9 | .62 | .41 | 2.1 | .46 | .41 | .23 | .10 |
| 14 | .12 | .56 | .94 | .70 | 1.4 | .62 | .51 | .94 | .67 | .41 | .23 | .29 |
| 15 | .12 | .51 | .94 | .70 | 1.2 | .56 | .56 | .72 | .62 | .41 | .23 | .62 |
| 16 | .12 | .51 | 1.0 | .70 | 1.2 | .56 | .51 | .77 | .67 | .41 | .33 | .26 |
| 17 | .12 | .52 | .94 | .70 | 1.9 | .51 | .51 | .67 | .46 | .41 | .23 | .18 |
| 18 | .15 | .52 | .94 | .80 | 1.5 | .51 | .51 | .56 | .33 | .41 | .18 | .13 |
| 19 | .18 | .60 | .88 | .80 | 1.4 | .41 | .45 | .51 | .29 | .41 | .18 | .15 |
| 20 | .15 | .67 | .88 | .76 | 5.5 | .41 | .45 | .50 | .29 | .62 | .15 | .13 |
| 21 | .15 | .67 | 1.1 | .72 | 5700 | .36 | .41 | .50 | .36 | .94 | .13 | .13 |
| 22 | .15 | .72 | 1.1 | .70 | 3110 | .36 | .36 | .46 | .41 | .77 | .13 | .23 |
| 23 | .13 | .72 | 1.2 | .70 | 1560 | .36 | .36 | .41 | .29 | .51 | .12 | .36 |
| 24 | .13 | 1.8 | 1.2 | .68 | 4380 | .36 | .45 | .36 | .33 | .41 | .13 | .36 |
| 25 | 1.1 | 3.3 | 1.1 | .64 | 2030 | .36 | .45 | .36 | .29 | .41 | .15 | .36 |
| 26 | 1.4 | 1.9 | 1.1 | .70 | 1150 | .33 | .41 | .36 | .33 | .41 | .12 | .29 |
| 27 | .62 | 1.2 | 1.1 | .80 | 686 | .33 | .36 | .36 | .26 | .51 | .10 | .26 |
| 28 | .41 | 1.1 | 1.0 | .80 | 434 | .33 | .29 | .36 | .23 | .41 | .10 | .41 |
| 29 | .29 | 1.1 | 1.0 | .70 | --- | .33 | .41 | .41 | .20 | .41 | .10 | .29 |
| 30 | .26 | 1.1 | 1.0 | .64 | --- | .29 | .56 | .41 | .20 | .36 | .10 | .23 |
| 31 | .23 | --- | 1.0 | .60 | --- | .36 | --- | .50 | --- | .33 | .10 | --- |
| TOTAL | 7.10 | 22.28 | 32.96 | 23.42 | 19112.60 | 485.38 | 14.41 | 19.78 | 10.93 | 16.06 | 6.91 | 7.05 |
| MEAN | .23 | .74 | 1.06 | .76 | 683 | 15.7 | .48 | .64 | .36 | .52 | .22 | .24 |
| MAX | 1.4 | 3.3 | 1.5 | 1.0 | 5700 | 323 | .82 | 4.9 | .67 | 1.1 | .41 | .62 |
| MIN | .08 | .23 | .88 | .60 | .70 | .29 | .29 | .26 | .20 | .20 | .10 | .09 |

CAL YR 1980 TOTAL 115095.90 MEAN 314 MAX 15300 MIN .04
WTR YR 1981 TOTAL 19758.88 MEAN 54.1 MAX 5700 MIN .08

## 01350120 PLATTER KILL AT GILBOA, NY

LOCATION.--Lat 42°24'18", long 74°26'36", Schoharie County, Hydrologic Unit 02020005, on right bank, 190 ft (58 m) upstream from culvert on County Highway 17, 0.5 mi (0.8 km) upstream from mouth, and 0.6 mi (1.0 km) northeast of Gilboa.

DRAINAGE AREA.--11.1 $mi^2$ (28.7 $km^2$).

PERIOD OF RECORD.--Occasional discharge measurements, water years 1969-73. January 1975 to current year.

GAGE.--Water-stage recorder. Concrete control since Nov. 12, 1976. Altitude of gage is 1,110 ft (338 m), from topographic map.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--6 years, 17.1 $ft^3/s$ (0.484 $m^3/s$), 20.92 in/yr (531 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 690 $ft^3/s$ (19.5 $m^3/s$) Oct. 17, 1977, gage height, 4.54 ft (1.384 m); maximum gage height, 4.59 ft (1.399 m) Feb. 11, 1981 (ice jam); minimum discharge, 0.32 $ft^3/s$ (0.009 $m^3/s$) Nov. 18, 1980 (result of freezeup); minimum gage height (subsequent to concrete control installation), 0.76 ft (0.232 m) Nov. 18, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 $ft^3/s$ (4.25 $m^3/s$) and maximum (*):

| Date | Time | Discharge ($ft^3/s$) | ($m^3/s$) | Gage height (ft) | (m) | Date | Time | Discharge ($ft^3/s$) | ($m^3/s$) | Gage height (ft) | (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 2 | 1000 | ice jam | | 3.54 | 1.079 | Feb. 11 | 1800 | *410 | 11.6 | *a4.59 | 1.399 |

a Ice jam.

Minimum discharge, 0.32 $ft^3/s$ (0.009 $m^3/s$) Nov. 18, gage height 0.76 ft (0.232 m), result of freezeup.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.2 | 1.6 | 4.6 | 2.3 | 1.7 | 33 | 13 | 10 | 8.7 | 4.2 | 2.9 | 1.3 |
| 2 | 1.3 | 1.6 | 5.2 | 2.2 | 25 | 27 | 23 | 9.3 | 7.4 | 5.0 | 2.8 | 1.3 |
| 3 | 1.4 | 1.5 | 7.0 | 2.1 | 13 | 22 | 18 | 8.7 | 7.2 | 9.3 | 2.8 | 3.7 |
| 4 | 2.0 | 1.5 | 6.2 | 2.0 | 9.4 | 18 | 17 | 8.0 | 7.2 | 7.7 | 2.7 | 2.1 |
| 5 | 1.4 | 1.5 | 5.6 | 2.0 | 7.4 | 17 | 18 | 7.7 | 6.6 | 18 | 2.8 | 1.6 |
| 6 | 1.2 | 1.4 | 5.2 | 2.0 | 7.0 | 16 | 18 | 8.0 | 6.4 | 15 | 2.6 | 1.5 |
| 7 | 1.2 | 1.3 | 4.8 | 1.9 | 6.8 | 15 | 16 | 8.0 | 5.9 | 9.3 | 2.4 | 1.5 |
| 8 | 1.2 | 1.4 | 5.0 | 1.9 | 6.6 | 13 | 14 | 7.2 | 5.2 | 7.4 | 3.0 | 2.9 |
| 9 | 1.2 | 2.1 | 5.2 | 1.9 | 6.4 | 12 | 15 | 7.2 | 5.0 | 7.2 | 2.5 | 4.1 |
| 10 | 1.1 | 2.8 | 5.4 | 1.9 | 6.4 | 12 | 15 | 6.6 | 5.0 | 5.9 | 2.3 | 1.9 |
| 11 | 1.3 | 2.1 | 5.2 | 1.8 | 190 | 12 | 14 | 7.4 | 5.2 | 5.4 | 2.2 | 1.5 |
| 12 | 1.2 | 1.8 | 4.5 | 1.8 | 70 | 11 | 12 | 54 | 4.8 | 5.0 | 2.1 | 1.3 |
| 13 | 1.3 | 1.7 | 4.2 | 1.9 | 35 | 11 | 12 | 53 | 5.7 | 4.4 | 2.0 | 1.3 |
| 14 | 1.2 | 1.8 | 4.2 | 1.9 | 23 | 10 | 13 | 37 | 9.3 | 4.1 | 2.0 | 2.4 |
| 15 | 1.2 | 1.6 | 4.2 | 2.0 | 19 | 10 | 13 | 32 | 8.7 | 4.1 | 2.2 | 2.4 |
| 16 | 1.2 | 1.6 | 4.0 | 2.0 | 19 | 10 | 12 | 35 | 17 | 3.7 | 2.4 | 1.7 |
| 17 | 1.2 | 1.7 | 3.9 | 1.9 | 21 | 9.4 | 11 | 27 | 10 | 3.3 | 1.9 | 1.6 |
| 18 | 1.6 | 2.0 | 3.9 | 1.9 | 24 | 8.8 | 12 | 21 | 7.4 | 3.1 | 1.8 | 1.5 |
| 19 | 1.4 | 2.1 | 3.8 | 1.8 | 31 | 8.2 | 10 | 18 | 6.1 | 3.0 | 1.7 | 1.6 |
| 20 | 1.2 | 2.0 | 3.8 | 1.8 | 66 | 7.6 | 9.7 | 16 | 6.4 | 4.4 | 1.6 | 1.5 |
| 21 | 1.2 | 2.0 | 3.7 | 1.7 | 76 | 7.0 | 9.0 | 15 | 10 | 7.2 | 1.6 | 1.4 |
| 22 | 1.1 | 2.2 | 3.7 | 1.7 | 59 | 7.2 | 8.7 | 13 | 10 | 6.9 | 1.6 | 2.7 |
| 23 | 1.1 | 2.0 | 3.4 | 1.6 | 51 | 7.4 | 9.3 | 12 | 8.3 | 4.6 | 1.6 | 3.4 |
| 24 | 1.0 | 6.6 | 3.0 | 1.6 | 70 | 7.7 | 12 | 11 | 7.2 | 4.2 | 1.8 | 4.8 |
| 25 | 6.9 | 7.7 | 2.7 | 1.7 | 53 | 8.0 | 11 | 9.7 | 6.9 | 3.6 | 1.5 | 3.2 |
| 26 | 5.4 | 5.0 | 2.7 | 1.7 | 45 | 8.3 | 9.3 | 9.0 | 7.4 | 3.9 | 1.4 | 2.3 |
| 27 | 2.5 | 4.6 | 2.7 | 1.7 | 40 | 9.0 | 8.7 | 8.7 | 7.2 | 3.9 | 1.4 | 2.3 |
| 28 | 2.2 | 4.6 | 2.7 | 1.6 | 35 | 8.7 | 8.3 | 8.0 | 5.9 | 3.2 | 1.4 | 3.0 |
| 29 | 2.0 | 4.8 | 2.6 | 1.6 | --- | 9.0 | 11 | 9.0 | 5.2 | 3.7 | 1.4 | 2.3 |
| 30 | 1.8 | 4.4 | 2.5 | 1.5 | --- | 10 | 12 | 8.7 | 4.6 | 3.2 | 1.4 | 2.1 |
| 31 | 1.6 | --- | 2.4 | 1.5 | --- | 12 | --- | 11 | --- | 3.0 | 1.4 | --- |
| TOTAL | 52.8 | 79.0 | 128.0 | 56.9 | 1016.7 | 377.3 | 385.0 | 496.2 | 217.9 | 176.9 | 63.2 | 66.2 |
| MEAN | 1.70 | 2.63 | 4.13 | 1.84 | 36.3 | 12.2 | 12.8 | 16.0 | 7.26 | 5.71 | 2.04 | 2.21 |
| MAX | 6.9 | 7.7 | 7.0 | 2.3 | 190 | 33 | 23 | 54 | 17 | 18 | 3.0 | 4.8 |
| MIN | 1.0 | 1.3 | 2.4 | 1.5 | 1.7 | 7.0 | 8.3 | 6.6 | 4.6 | 3.0 | 1.4 | 1.3 |
| CFSM | .15 | .24 | .37 | .17 | 3.27 | 1.10 | 1.15 | 1.44 | .65 | .51 | .18 | .20 |
| IN. | .18 | .26 | .43 | .19 | 3.41 | 1.26 | 1.29 | 1.66 | .73 | .59 | .21 | .22 |

CAL YR 1980 TOTAL 2957.08 MEAN 8.08 MAX 243 MIN .89 CFSM .73 IN 9.91
WTR YR 1981 TOTAL 3116.10 MEAN 8.54 MAX 190 MIN 1.0 CFSM .77 IN 10.44

## 01350140 MINE KILL NEAR NORTH BLENHEIM, NY

LOCATION.--Lat 42°25'44", long 74°28'24", Schoharie County, Hydrologic Unit 02020005, on left bank 200 ft (61 m) upstream from bridge on State Highway 30, 0.6 mi (1.0 km) upstream from mouth, and 3.0 mi (4.8 km) southwest of North Blenheim.

DRAINAGE AREA.--16.3 mi$^2$ (42.2 km$^2$).

PERIOD OF RECORD.--Occasional discharge measurements, water years 1969-74. December 1974 to current year.

GAGE.--Water-stage recorder. Concrete control since Sept. 23, 1975. Altitude of gage is 1,060 ft (323 m), from topographic map.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--6 years, 27.1 ft$^3$/s (0.77 m$^3$/s), 22.58 in/yr (574 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,190 ft$^3$/s (33.7 m$^3$/s) Mar. 14, 1977, gage height, 3.41 ft (1.039 m); maximum gage height, 3.60 ft (1.097 m) Feb. 2, 1981 (ice jam); minimum discharge, 0.10 ft$^3$/s (0.003 m$^3$/s) Aug. 27-30, 1980, gage height, 0.49 ft (0.149 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 550 ft$^3$/s (15.6 m$^3$/s) and maximum (*):

| Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|
| Feb. 2 | 1400 | *738 | 20.9 | *a3.60 | 1.097 |
| Feb. 11 | 1730 | ice jam | | 3.47 | 1.058 |

a Ice jam.

Minimum discharge, 0.11 ft$^3$/s (0.003 m$^3$/s) Aug. 22-24, 28, 29; minimum gage height, 0.58 ft (0.177 m), Oct. 10, 11, 12.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .38 | 2.4 | 9.4 | 3.0 | 60 | 57 | 20 | 21 | 14 | 3.3 | .88 | .12 |
| 2 | .38 | 2.2 | 13 | 2.8 | 450 | 48 | 51 | 19 | 10 | 7.0 | .64 | .12 |
| 3 | .38 | 1.9 | 33 | 2.7 | 100 | 45 | 31 | 18 | 9.6 | 9.6 | .46 | 4.2 |
| 4 | .38 | 1.7 | 16 | 2.5 | 60 | 48 | 26 | 15 | 11 | 6.3 | .31 | 3.9 |
| 5 | .46 | 1.5 | 11 | 2.3 | 40 | 40 | 31 | 14 | 8.2 | 36 | .46 | .84 |
| 6 | .46 | 1.4 | 11 | 2.2 | 25 | 34 | 32 | 13 | 7.6 | 18 | 1.0 | .14 |
| 7 | .46 | 1.6 | 12 | 2.0 | 25 | 28 | 26 | 13 | 6.3 | 9.6 | .75 | .14 |
| 8 | .38 | 1.4 | 13 | 1.9 | 25 | 26 | 25 | 11 | 5.0 | 5.9 | 1.0 | .40 |
| 9 | .38 | 1.3 | 11 | 1.7 | 25 | 26 | 25 | 9.6 | 7.6 | 4.1 | 1.5 | 2.2 |
| 10 | .31 | 1.8 | 9.0 | 1.6 | 40 | 25 | 28 | 8.9 | 7.6 | 7.0 | 1.0 | .92 |
| 11 | .31 | 3.0 | 8.0 | 1.5 | 300 | 25 | 22 | 12 | 9.6 | 3.3 | .46 | .28 |
| 12 | .31 | 2.0 | 7.0 | 1.4 | 100 | 23 | 21 | 224 | 6.3 | 2.5 | .25 | .14 |
| 13 | .38 | 1.5 | 6.0 | 1.3 | 45 | 22 | 18 | 96 | 11 | 1.8 | .19 | .14 |
| 14 | .46 | 1.3 | 5.6 | 1.3 | 40 | 15 | 22 | 65 | 28 | 1.6 | .18 | .34 |
| 15 | .55 | 1.2 | 5.2 | 1.3 | 25 | 15 | 22 | 69 | 20 | 1.5 | .18 | 3.5 |
| 16 | .55 | 1.1 | 5.0 | 1.4 | 25 | 14 | 18 | 78 | 20 | 1.3 | 1.2 | 1.8 |
| 17 | .55 | 1.0 | 5.0 | 1.5 | 30 | 13 | 18 | 51 | 11 | 1.3 | 1.0 | .85 |
| 18 | .55 | .90 | 5.0 | 1.5 | 40 | 12 | 20 | 41 | 7.6 | 1.3 | .35 | .61 |
| 19 | .55 | .90 | 5.0 | 1.5 | 60 | 11 | 16 | 34 | 6.3 | 1.3 | .15 | 1.2 |
| 20 | .64 | .90 | 4.9 | 1.5 | 180 | 10 | 15 | 28 | 7.0 | 18 | .13 | 1.1 |
| 21 | .55 | .90 | 4.8 | 1.5 | 150 | 10 | 13 | 23 | 13 | 7.6 | .12 | 1.6 |
| 22 | .55 | .90 | 4.7 | 1.5 | 104 | 9.8 | 13 | 20 | 13 | 3.7 | .11 | 2.2 |
| 23 | .55 | 1.5 | 4.7 | 1.4 | 80 | 9.8 | 15 | 16 | 9.6 | 1.6 | .11 | 14 |
| 24 | .55 | 31 | 4.6 | 1.4 | 115 | 9.6 | 31 | 13 | 7.0 | .88 | .11 | 31 |
| 25 | 12 | 69 | 4.5 | 1.3 | 82 | 9.6 | 25 | 11 | 8.2 | .75 | .12 | 21 |
| 26 | 30 | 28 | 4.3 | 1.3 | 76 | 10 | 20 | 10 | 15 | .64 | .13 | 9.6 |
| 27 | 8.0 | 12 | 4.0 | 1.3 | 62 | 11 | 18 | 9.6 | 8.2 | 1.6 | .12 | 7.6 |
| 28 | 4.5 | 10 | 3.8 | 1.3 | 57 | 11 | 15 | 7.6 | 5.6 | 1.3 | .11 | 25 |
| 29 | 3.7 | 14 | 3.6 | 1.4 | --- | 11 | 22 | 9.6 | 4.1 | 1.5 | .11 | 20 |
| 30 | 3.3 | 10 | 3.4 | 1.5 | --- | 13 | 31 | 14 | 4.1 | 1.6 | .12 | 14 |
| 31 | 2.8 | --- | 3.2 | 4.0 | --- | 19 | --- | 32 | --- | 1.3 | .12 | --- |
| TOTAL | 75.32 | 208.30 | 240.7 | 54.8 | 2421 | 660.8 | 690 | 1006.3 | 301.5 | 163.17 | 13.37 | 168.94 |
| MEAN | 2.43 | 6.94 | 7.76 | 1.77 | 86.5 | 21.3 | 23.0 | 32.5 | 10.1 | 5.26 | .43 | 5.63 |
| MAX | 30 | 69 | 33 | 4.0 | 450 | 57 | 51 | 224 | 28 | 36 | 1.5 | 31 |
| MIN | .31 | .90 | 3.2 | 1.3 | 25 | 9.6 | 13 | 7.6 | 4.1 | .64 | .11 | .12 |
| CFSM | .15 | .43 | .48 | .11 | 5.31 | 1.31 | 1.41 | 1.99 | .62 | .32 | .03 | .35 |
| IN. | .17 | .48 | .55 | .13 | 5.52 | 1.51 | 1.57 | 2.30 | .69 | .37 | .03 | .39 |

CAL YR 1980 TOTAL 5292.28 MEAN 14.5 MAX 389 MIN .10 CFSM .89 IN 12.08
WTR YR 1981 TOTAL 6004.20 MEAN 16.4 MAX 450 MIN .11 CFSM 1.01 IN 13.70

## 01350180 SCHOHARIE CREEK AT NORTH BLENHEIM, NY

LOCATION.--Lat 42°27'57", long 74°27'45", Schoharie County, Hydrologic Unit 02020005, on left bank 2300 ft (701 m) upstream from West Kill, and 1.2 mi (1.9 km) upstream from bridge on State Highway 30 in North Blenheim. Water-quality sampling site at discharge station.

DRAINAGE AREA.--359 mi$^3$ (930 km$^2$).

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional measurements, water years 1969-70. October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 800 ft (244 m), from topographic map. Prior to Oct. 1, 1971, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records poor. Regulation of flow by Blenheim-Gilboa Pumped Storage Project immediately upstream from gage. Entire flow, runoff from 314 mi$^2$ (813 km$^2$), except for periods of spill, diverted from Schoharie Reservoir through Shandaken Tunnel into Esopus Creek upstream from Ashokan Reservoir for water supply of City of New York. For periods of spill see station 01350101.

AVERAGE DISCHARGE.--11 years, 512 ft$^3$/s (14.50 m$^3$/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42,900 ft$^3$/s (1,210 m$^3$/s) Mar. 21, 1980, gage height, 14.72 ft (4.487 m) from floodmark, from rating curve extended above 14,000 ft$^3$/s (396 m$^3$/s); no flow Oct. 21-28, 1972, Sept. 12-14, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,350 ft$^3$/s (208 m$^3$/s) Feb. 21, gage height, 8.98 ft (2.737 m) minimum daily, 4.1 ft$^3$/s (0.12 m$^3$/s) Oct. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.2 | 5.4 | 6.6 | 9.0 | 7.6 | 385 | 52 | 43 | 56 | 6.4 | 7.2 | 7.0 |
| 2 | 5.6 | 5.4 | 6.6 | 9.0 | 600 | 159 | 86 | 40 | 24 | 6.4 | 6.6 | 6.9 |
| 3 | 5.4 | 5.2 | 6.9 | 9.0 | 100 | 110 | 50 | 25 | 16 | 31 | 6.4 | 6.9 |
| 4 | 5.4 | 5.6 | 7.2 | 9.0 | 30 | 89 | 48 | 14 | 11 | 37 | 6.1 | 6.4 |
| 5 | 5.6 | 5.9 | 6.9 | 9.0 | 29 | 56 | 60 | 9.8 | 12 | 97 | 6.4 | 6.6 |
| 6 | 5.2 | 5.4 | 6.6 | 8.0 | 28 | 18 | 70 | 19 | 10 | 42 | 6.1 | 6.1 |
| 7 | 5.4 | 5.2 | 6.6 | 8.0 | 26 | 30 | 40 | 29 | 11 | 12 | 6.1 | 6.1 |
| 8 | 5.0 | 5.2 | 8.4 | 8.0 | 80 | 92 | 41 | 23 | 19 | 7.2 | 6.4 | 6.6 |
| 9 | 4.5 | 5.4 | 10 | 8.0 | 200 | 67 | 40 | 11 | 25 | 6.6 | 6.6 | 6.4 |
| 10 | 4.3 | 5.6 | 11 | 8.0 | 50 | 18 | 40 | 9.8 | 16 | 6.6 | 6.9 | 5.9 |
| 11 | 4.3 | 5.0 | 9.8 | 8.0 | 1000 | 18 | 70 | 29 | 14 | 6.6 | 6.6 | 6.1 |
| 12 | 4.3 | 4.7 | 9.4 | 8.0 | 450 | 43 | 38 | 499 | 10 | 6.6 | 6.9 | 6.4 |
| 13 | 4.3 | 4.5 | 9.8 | 8.0 | 90 | 43 | 45 | 228 | 7.8 | 6.9 | 6.9 | 6.4 |
| 14 | 4.7 | 4.5 | 10 | 8.0 | 120 | 40 | 31 | 128 | 51 | 6.4 | 6.6 | 6.4 |
| 15 | 4.3 | 4.7 | 12 | 8.0 | 140 | 58 | 49 | 99 | 50 | 6.1 | 6.9 | 6.4 |
| 16 | 4.2 | 4.7 | 9.8 | 8.0 | 100 | 68 | 28 | 195 | 42 | 6.1 | 6.6 | 6.1 |
| 17 | 4.2 | 5.9 | 10 | 8.0 | 150 | 18 | 37 | 108 | 41 | 6.4 | 6.9 | 6.6 |
| 18 | 4.5 | 6.9 | 10 | 8.0 | 300 | 16 | 64 | 71 | 28 | 6.4 | 6.9 | 6.9 |
| 19 | 4.3 | 5.6 | 9.8 | 8.0 | 130 | 16 | 39 | 66 | 8.4 | 6.1 | 6.6 | 6.9 |
| 20 | 4.1 | 5.4 | 10 | 8.0 | 865 | 16 | 25 | 56 | 9.8 | 6.6 | 7.2 | 6.4 |
| 21 | 4.5 | 5.6 | 10 | 7.6 | 5980 | 16 | 16 | 52 | 23 | 6.4 | 6.6 | 5.2 |
| 22 | 4.7 | 5.6 | 10 | 7.6 | 4160 | 22 | 14 | 41 | 59 | 6.9 | 6.6 | 4.5 |
| 23 | 4.3 | 5.9 | 10 | 7.6 | 2290 | 40 | 14 | 33 | 16 | 5.9 | 7.2 | 4.5 |
| 24 | 4.2 | 7.8 | 10 | 7.6 | 5110 | 38 | 61 | 29 | 11 | 6.1 | 7.8 | 5.2 |
| 25 | 12 | 9.4 | 10 | 7.6 | 2360 | 23 | 56 | 25 | 8.1 | 6.4 | 6.9 | 4.5 |
| 26 | 24 | 7.8 | 9.0 | 7.6 | 1340 | 18 | 34 | 48 | 8.4 | 6.4 | 7.0 | 4.5 |
| 27 | 11 | 7.2 | 9.0 | 7.6 | 689 | 21 | 20 | 23 | 7.8 | 6.9 | 7.0 | 4.3 |
| 28 | 6.9 | 6.9 | 9.0 | 7.6 | 424 | 18 | 19 | 13 | 9.1 | 6.6 | 7.0 | 5.4 |
| 29 | 5.6 | 6.6 | 9.0 | 7.6 | --- | 19 | 27 | 23 | 23 | 6.1 | 7.0 | 6.6 |
| 30 | 5.4 | 6.4 | 9.0 | 7.6 | --- | 27 | 72 | 30 | 11 | 6.1 | 7.0 | 6.9 |
| 31 | 5.4 | --- | 9.0 | 7.6 | --- | 52 | --- | 70 | --- | 6.6 | 7.0 | --- |
| TOTAL | 182.8 | 175.4 | 281.4 | 248.6 | 26848.6 | 1654 | 1286 | 2089.6 | 638.4 | 386.8 | 210.0 | 181.1 |
| MEAN | 5.90 | 5.85 | 9.08 | 8.02 | 959 | 53.4 | 42.9 | 67.4 | 21.3 | 12.5 | 6.77 | 6.04 |
| MAX | 24 | 9.4 | 12 | 9.0 | 5980 | 385 | 86 | 499 | 59 | 97 | 7.8 | 7.0 |
| MIN | 4.1 | 4.5 | 6.6 | 7.6 | 7.6 | 16 | 14 | 9.8 | 7.8 | 5.9 | 6.1 | 4.3 |

CAL YR 1980 TOTAL 119719.0 MEAN 327 MAX 18000 MIN 3.9
WTR YR 1981 TOTAL 34182.7 MEAN 93.7 MAX 5980 MIN 4.1

## 01350180 SCHOHARIE CREEK AT NORTH BLENHEIM, NY--Continued

### WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971 to current year.
CHEMICAL DATA: 1971-72 (a), 1975-76 (d).
NUTRIENT DATA: 1971 (a), 1975-76 (d).
BIOLOGICAL DATA:
Bacteria--1975-76 (d).
SEDIMENT DATA: 1975-76 (a).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1971 to current year.

REMARKS.--Temperature probe may be influenced by solar radiation during periods of low flow.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1973-76, 80-81), 33.5°C Aug. 7, 1973; minimum, freezing point on many days during winter periods, except water years 1978-80.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 31.5° July 10; minimum, freezing point on many days during December and January.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 21.5 | 14.0 | 17.0 | 9.0 | 6.0 | 7.0 | 7.0 | 3.5 | 5.0 | .5 | .0 | .0 |
| 2 | 18.5 | 15.0 | 16.5 | 9.5 | 4.5 | 6.5 | 9.0 | 4.5 | 7.5 | .0 | .0 | .0 |
| 3 | 17.0 | 15.0 | 16.0 | 10.5 | 4.0 | 6.5 | 6.0 | 1.0 | 3.0 | .0 | .0 | .0 |
| 4 | 16.5 | 13.0 | 15.0 | 9.5 | 6.5 | 8.0 | 2.0 | 1.0 | 1.0 | .0 | .0 | .0 |
| 5 | 18.0 | 11.5 | 14.0 | 9.5 | 5.5 | 7.5 | 2.0 | 1.0 | 1.5 | .0 | .0 | .0 |
| 6 | 18.0 | 11.5 | 13.5 | 8.5 | 5.0 | 6.5 | 2.5 | 1.0 | 1.5 | .0 | .0 | .0 |
| 7 | 16.0 | 12.0 | 13.5 | 12.5 | 6.5 | 9.0 | 3.0 | 1.0 | 2.0 | .0 | .0 | .0 |
| 8 | 18.5 | 10.5 | 14.0 | 11.0 | 5.5 | 9.0 | 5.0 | 2.5 | 3.5 | .0 | .0 | .0 |
| 9 | 18.0 | 11.0 | 14.0 | 8.0 | 5.0 | 6.0 | 4.0 | 2.5 | 3.5 | .0 | .0 | .0 |
| 10 | 16.5 | 9.0 | 12.5 | 7.0 | 4.0 | 6.0 | 4.5 | 2.5 | 3.0 | .0 | .0 | .0 |
| 11 | 16.5 | 13.0 | 14.5 | 5.0 | 3.0 | 4.0 | 2.5 | 1.0 | 1.5 | .0 | .0 | .0 |
| 12 | 13.0 | 11.0 | 12.0 | 4.5 | 2.5 | 3.5 | 2.0 | 1.0 | 1.5 | .0 | .0 | .0 |
| 13 | 12.5 | 9.5 | 10.5 | 8.0 | 2.0 | 4.5 | 3.0 | 1.0 | 2.0 | .0 | .0 | .0 |
| 14 | 14.5 | 8.5 | 10.0 | 6.5 | 4.5 | 5.5 | 1.5 | .5 | 1.0 | .0 | .0 | .0 |
| 15 | 11.0 | 8.5 | 9.5 | 5.5 | 4.5 | 5.0 | 1.0 | .5 | 1.0 | .0 | .0 | .0 |
| 16 | 14.5 | 9.5 | 12.0 | 6.5 | 2.0 | 4.0 | 1.0 | 1.0 | 1.0 | .0 | .0 | .0 |
| 17 | 19.5 | 11.5 | 14.5 | 5.0 | 1.0 | 2.5 | 1.0 | .5 | 1.0 | .0 | .0 | .0 |
| 18 | 16.5 | 14.0 | 15.5 | 1.5 | .5 | 1.0 | 1.0 | .5 | 1.0 | .0 | .0 | .0 |
| 19 | 17.5 | 12.0 | 14.0 | 5.0 | 1.5 | 2.5 | 1.5 | .5 | 1.0 | .0 | .0 | .0 |
| 20 | 13.5 | 9.5 | 11.5 | 6.5 | 2.0 | 3.5 | .5 | .5 | .5 | .0 | .0 | .0 |
| 21 | 12.0 | 9.0 | 10.0 | 6.0 | 1.5 | 3.0 | .5 | .5 | .5 | .0 | .0 | .0 |
| 22 | 11.0 | 8.0 | 9.0 | 6.0 | 2.5 | 4.0 | .5 | .5 | .5 | .0 | .0 | .0 |
| 23 | 13.0 | 6.5 | 8.5 | 5.5 | 1.5 | 3.5 | .5 | .5 | .5 | .5 | .0 | .0 |
| 24 | 12.5 | 5.5 | 8.0 | 5.5 | 3.5 | 4.5 | .5 | .5 | .5 | .5 | .5 | .5 |
| 25 | 10.0 | 7.0 | 8.5 | 5.0 | 3.5 | 4.0 | .5 | .5 | .5 | .5 | .5 | .5 |
| 26 | 11.0 | 9.0 | 10.0 | 6.0 | 2.0 | 3.0 | .5 | .5 | .5 | .5 | .5 | .5 |
| 27 | 12.0 | 7.5 | 9.0 | 3.5 | 1.5 | 2.5 | .5 | .5 | .5 | .5 | .5 | .5 |
| 28 | 9.5 | 7.5 | 8.5 | 4.0 | 3.0 | 3.5 | .5 | .0 | .5 | 1.0 | .5 | 1.0 |
| 29 | 8.5 | 7.0 | 7.5 | 5.0 | 3.0 | 4.0 | .5 | .0 | .0 | 1.0 | 1.0 | 1.0 |
| 30 | 8.0 | 6.0 | 7.0 | 5.5 | 3.0 | 3.5 | .5 | .0 | .0 | 1.0 | 1.0 | 1.0 |
| 31 | 12.0 | 5.0 | 7.5 | --- | --- | --- | .5 | .0 | .0 | 1.0 | .5 | 1.0 |
| MONTH | 21.5 | 5.0 | 11.5 | 12.5 | .5 | 5.0 | 9.0 | .0 | 1.5 | 1.0 | .0 | .0 |

01350180 SCHOHARIE CREEK AT NORTH BLENHEIM, NY--Continued

TEMPERATURE, (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | 1.0 | .5 | .5 | 3.0 | 3.0 | 3.0 | 8.0 | 3.5 | 6.0 | 12.5 | 7.0 | 9.5 |
| 2 | 2.5 | .5 | 1.0 | 3.5 | 2.5 | 3.0 | 7.0 | 5.0 | 5.5 | 11.5 | 8.5 | 9.5 |
| 3 | 3.0 | .5 | 1.5 | 4.0 | 1.5 | 2.5 | 10.5 | 4.0 | 7.0 | 15.5 | 7.0 | 11.0 |
| 4 | 1.0 | .5 | 1.0 | 3.5 | 1.0 | 2.5 | 10.5 | 6.5 | 8.0 | 17.5 | 7.5 | 12.5 |
| 5 | 1.0 | .5 | 1.0 | 3.0 | 1.5 | 2.5 | 9.5 | 7.5 | 9.0 | 21.0 | 11.5 | 16.0 |
| 6 | 1.0 | .5 | .5 | 3.5 | 1.0 | 2.0 | 8.5 | 5.0 | 6.5 | 14.5 | 8.5 | 12.0 |
| 7 | 2.0 | .5 | 1.0 | 3.5 | 1.5 | 2.5 | 11.0 | 4.5 | 7.5 | 14.5 | 7.0 | 10.5 |
| 8 | 2.0 | .5 | 1.5 | 3.5 | 2.5 | 2.5 | 12.0 | 5.0 | 8.5 | 16.5 | 7.5 | 12.0 |
| 9 | 2.0 | 1.0 | 1.5 | 4.0 | 2.5 | 3.0 | 11.0 | 7.5 | 9.0 | 17.0 | 9.0 | 13.0 |
| 10 | 2.0 | .5 | 1.5 | 6.0 | 2.0 | 3.5 | 12.5 | 6.0 | 9.0 | 20.0 | 10.5 | 15.5 |
| 11 | 2.5 | 2.0 | 2.5 | 6.0 | 2.5 | 4.0 | 9.0 | 6.5 | 8.0 | 16.0 | 10.5 | 13.5 |
| 12 | 2.5 | 1.0 | 2.0 | 4.5 | 1.5 | 3.0 | 12.0 | 7.0 | 9.0 | 12.5 | 10.0 | 11.5 |
| 13 | 2.5 | .5 | 1.5 | 5.0 | 2.5 | 3.5 | 13.0 | 6.5 | 9.5 | 12.5 | 10.0 | 11.0 |
| 14 | 3.0 | .5 | 1.5 | 4.5 | 1.5 | 2.5 | 8.5 | 6.5 | 7.5 | 14.0 | 10.0 | 11.5 |
| 15 | 3.5 | 1.5 | 2.0 | 6.0 | 1.5 | 3.5 | 10.5 | 6.0 | 7.5 | 14.5 | 10.5 | 12.0 |
| 16 | 4.5 | 1.5 | 3.0 | 4.0 | 1.5 | 3.0 | 12.5 | 5.0 | 8.5 | 12.0 | 11.0 | 11.5 |
| 17 | 4.0 | 2.5 | 3.0 | 4.0 | 1.0 | 2.0 | 9.5 | 7.0 | 8.5 | 14.5 | 10.5 | 12.0 |
| 18 | 3.5 | 2.5 | 3.0 | 4.0 | .5 | 2.0 | 12.5 | 7.5 | 9.5 | 14.5 | 10.0 | 12.0 |
| 19 | 5.5 | 2.5 | 3.5 | 2.5 | .5 | 1.5 | 13.0 | 6.0 | 9.5 | 15.0 | 9.5 | 12.0 |
| 20 | 3.5 | 3.0 | 3.5 | 5.0 | .5 | 2.0 | 9.5 | 6.0 | 7.5 | 16.5 | 10.0 | 12.5 |
| 21 | 3.0 | 2.5 | 3.0 | 2.0 | .5 | 1.0 | 11.5 | 4.0 | 7.5 | 16.5 | 10.5 | 13.5 |
| 22 | 3.0 | 2.5 | 2.5 | 4.5 | .5 | 2.0 | 13.5 | 5.0 | 9.0 | 18.0 | 11.5 | 14.5 |
| 23 | 3.0 | 3.0 | 3.0 | 5.0 | 1.0 | 2.5 | 9.0 | 7.0 | 7.5 | 18.5 | 11.0 | 14.5 |
| 24 | 3.0 | 3.0 | 3.0 | 5.5 | 1.5 | 3.0 | 9.5 | 7.0 | 8.0 | 19.0 | 11.0 | 15.5 |
| 25 | 3.0 | 3.0 | 3.0 | 6.0 | 2.0 | 4.0 | 9.0 | 7.0 | 8.0 | 21.5 | 13.0 | 17.0 |
| 26 | 3.0 | 3.0 | 3.0 | 8.0 | 1.5 | 4.5 | 11.5 | 7.0 | 9.0 | 18.0 | 13.5 | 15.5 |
| 27 | 3.5 | 3.0 | 3.0 | 4.5 | 3.0 | 4.0 | 13.5 | 7.0 | 10.0 | 20.5 | 13.5 | 17.0 |
| 28 | 3.0 | 3.0 | 3.0 | 8.0 | 1.5 | 4.5 | 11.0 | 8.5 | 9.5 | 21.0 | 16.0 | 18.0 |
| 29 | --- | --- | --- | 10.5 | 3.0 | 7.0 | 12.5 | 9.0 | 10.5 | 19.0 | 16.0 | 17.5 |
| 30 | --- | --- | --- | 8.0 | 5.5 | 7.0 | 11.0 | 8.0 | 9.5 | 20.0 | 14.5 | 17.0 |
| 31 | --- | --- | --- | 7.0 | 4.5 | 6.0 | --- | --- | --- | 16.5 | 13.5 | 15.5 |
| MONTH | 5.5 | .5 | 2.0 | 10.5 | .5 | 3.0 | 13.5 | 3.5 | 8.5 | 21.5 | 7.0 | 13.5 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 19.0 | 12.5 | 15.5 | 26.0 | 21.0 | 23.5 | 27.5 | 19.5 | 23.0 | 23.5 | 19.0 | 21.0 |
| 2 | 18.0 | 13.0 | 15.5 | 28.5 | 22.0 | 24.5 | 27.0 | 20.0 | 23.0 | 23.0 | 20.0 | 21.5 |
| 3 | 18.0 | 15.0 | 16.5 | 27.0 | 20.5 | 23.0 | 27.5 | 20.5 | 23.5 | 20.5 | 19.0 | 20.0 |
| 4 | 23.0 | 16.0 | 19.5 | 22.5 | 20.0 | 21.0 | 27.0 | 21.5 | 23.5 | 21.5 | 18.5 | 19.5 |
| 5 | 24.5 | 17.5 | 20.5 | 22.0 | 20.0 | 21.0 | 25.5 | 21.5 | 23.0 | 24.0 | 18.5 | 20.5 |
| 6 | 24.0 | 18.0 | 20.0 | 25.5 | 20.5 | 22.5 | 27.0 | 19.5 | 22.5 | 22.0 | 19.5 | 21.0 |
| 7 | 22.0 | 17.0 | 18.5 | 29.0 | 20.5 | 24.5 | 28.0 | 20.0 | 23.5 | 24.0 | 19.5 | 21.5 |
| 8 | 22.5 | 15.0 | 18.5 | 30.5 | 22.5 | 26.0 | 25.0 | 21.0 | 22.5 | 22.5 | 20.0 | 21.0 |
| 9 | 21.0 | 16.5 | 18.5 | 30.0 | 24.0 | 27.0 | 28.0 | 20.0 | 23.5 | 22.5 | 17.0 | 19.5 |
| 10 | 21.0 | 15.0 | 18.0 | 31.5 | 24.5 | 27.0 | 28.5 | 20.5 | 23.5 | 23.0 | 15.0 | 18.5 |
| 11 | 22.0 | 15.0 | 18.0 | 30.0 | 22.0 | 25.5 | 28.0 | 20.5 | 23.0 | 25.0 | 17.5 | 20.5 |
| 12 | 24.0 | 16.0 | 19.5 | 29.5 | 22.5 | 25.5 | 25.5 | 20.5 | 22.5 | 24.5 | 18.5 | 21.0 |
| 13 | 25.0 | 17.5 | 21.0 | 29.5 | 23.0 | 25.5 | 26.0 | 19.5 | 22.5 | 25.5 | 17.5 | 20.5 |
| 14 | 21.0 | 16.5 | 18.5 | 27.0 | 21.5 | 23.5 | 26.0 | 20.5 | 22.5 | 24.5 | 19.0 | 21.0 |
| 15 | 23.5 | 16.5 | 19.5 | 27.5 | 20.0 | 23.0 | 23.0 | 21.0 | 22.0 | 23.0 | 19.5 | 21.0 |
| 16 | 23.0 | 19.0 | 21.0 | 27.5 | 20.0 | 23.5 | 24.0 | 18.5 | 21.5 | 20.5 | 18.5 | 19.0 |
| 17 | 22.0 | 18.5 | 20.0 | 27.5 | 20.0 | 23.5 | 23.0 | 17.0 | 19.0 | 20.0 | 17.5 | 18.5 |
| 18 | 25.5 | 16.5 | 20.5 | 27.5 | 20.5 | 23.5 | 25.0 | 15.5 | 19.5 | 22.5 | 16.5 | 19.0 |
| 19 | 27.0 | 19.0 | 23.0 | 28.0 | 21.0 | 24.0 | 26.5 | 17.0 | 20.5 | 20.0 | 17.5 | 18.5 |
| 20 | 23.0 | 20.5 | 22.0 | 23.5 | 22.0 | 23.0 | 26.5 | 17.0 | 21.0 | 20.0 | 15.5 | 17.5 |
| 21 | 22.5 | 19.5 | 21.0 | 26.5 | 22.0 | 24.0 | 26.5 | 17.5 | 21.5 | 19.5 | 14.0 | 16.5 |
| 22 | 21.0 | 18.5 | 20.0 | 26.5 | 21.0 | 23.0 | 22.0 | 18.5 | 20.0 | 17.5 | 15.5 | 16.5 |
| 23 | 22.0 | 18.0 | 19.5 | 27.0 | 18.5 | 22.0 | 26.0 | 17.5 | 21.0 | 15.5 | 13.0 | 14.5 |
| 24 | 25.0 | 17.0 | 20.5 | 26.5 | 19.0 | 22.5 | 22.5 | 19.0 | 20.0 | 14.0 | 12.5 | 13.0 |
| 25 | 25.0 | 19.5 | 21.5 | 25.0 | 20.0 | 22.0 | 24.0 | 18.5 | 20.5 | 20.0 | 12.0 | 15.0 |
| 26 | 21.0 | 18.0 | 19.0 | 23.5 | 19.5 | 21.5 | 26.5 | 18.0 | 21.5 | 17.5 | 14.5 | 16.0 |
| 27 | 25.0 | 16.0 | 20.5 | 27.5 | 21.0 | 23.0 | 23.0 | 18.0 | 20.0 | 22.5 | 15.0 | 18.5 |
| 28 | 27.5 | 18.0 | 22.5 | 22.5 | 19.5 | 20.5 | 27.0 | 18.5 | 22.0 | 18.5 | 13.5 | 16.0 |
| 29 | 24.0 | 19.0 | 21.5 | 24.0 | 19.0 | 21.0 | 21.5 | 19.5 | 20.5 | 16.5 | 12.0 | 13.5 |
| 30 | 29.0 | 19.5 | 23.5 | 25.0 | 17.0 | 20.5 | 24.5 | 19.0 | 21.5 | 15.5 | 10.5 | 12.0 |
| 31 | --- | --- | --- | 28.5 | 18.5 | 22.5 | 22.5 | 19.5 | 21.5 | --- | --- | --- |
| MONTH | 29.0 | 12.5 | 20.0 | 31.5 | 17.0 | 23.5 | 28.5 | 15.5 | 22.0 | 25.5 | 10.5 | 18.5 |

## 01350200 WEST KILL AT NORTH BLENHEIM, NY

**LOCATION.**--Lat 42°28'07", long 74°27'34", Schoharie County, Hydrologic Unit 02020005, on left bank 75 ft (23 m) upstream from highway bridge on State Highway 30, in North Blenheim, 100 ft (30 m) downstream from Mill Creek and 0.2 mi (0.3 km) upstream from mouth.

**DRAINAGE AREA.**--44.6 $mi^2$ (115.5 $km^2$).

**PERIOD OF RECORD.**--Occasional discharge measurements, water years 1970-72, July 1975 to current year.

**GAGE.**--Water-stage recorder. Altitude of gage is 810 ft (247 m), from topographic map.

**REMARKS.**--Records fair, except those for winter periods, which are poor.

**AVERAGE DISCHARGE.**--6 years, 91.1 $ft^3/s$ (2.580 $m^3/s$), 27.73 in/yr (704 mm/yr).

**EXTREMES FOR PERIOD OF RECORD.**--Maximum discharge, 12,100 $ft^3/s$ (343 $m^3/s$) Oct. 18, 1975, gage height, 5.91 ft (1.801 m) from rating curve extended above 2,700 $ft^3/s$ (76 $m^3/s$); maximum gage height, 7.82 ft (2.384 m) Oct. 17, 1977; minimum discharge, 0.53 $ft^3/s$ (0.015 $m^3/s$) Aug. 28-30, 1980; minimum gage height, 0.68 ft (0.207 m) July 25, 1977.

**EXTREMES FOR CURRENT YEAR.**--Peak discharge above base of 2,000 $ft^3/s$ (56.6 $m^3/s$):

| Date | Time | Discharge ($ft^3/s$) | Discharge ($m^3/s$) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|
| Feb. 11 | 1330 | *3,470 | 98.3 | *5.96 | 1.810 |

Minimum discharge, 1.0 $ft^3/s$ (0.028 $m^3/s$) Oct. 10, 11; Aug. 28, 29; minimum gage height, 1.78 ft (0.542 m) Aug. 28, 29.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.3 | 6.7 | 36 | 18 | 7.0 | 153 | 62 | 51 | 109 | 14 | 3.1 | 1.6 |
| 2 | 1.3 | 6.3 | 47 | 17 | 300 | 127 | 135 | 45 | 81 | 17 | 2.8 | 1.5 |
| 3 | 1.4 | 5.6 | 79 | 16 | 250 | 100 | 91 | 42 | 69 | 23 | 2.6 | 5.0 |
| 4 | 1.9 | 5.3 | 35 | 15 | 150 | 90 | 81 | 38 | 69 | 16 | 2.4 | 7.3 |
| 5 | 1.8 | 5.2 | 39 | 14 | 130 | 80 | 89 | 35 | 54 | 43 | 2.6 | 3.7 |
| 6 | 1.5 | 4.8 | 43 | 13 | 110 | 76 | 91 | 34 | 53 | 34 | 2.8 | 2.6 |
| 7 | 1.4 | 4.5 | 50 | 12 | 110 | 69 | 74 | 34 | 47 | 21 | 2.4 | 2.6 |
| 8 | 1.3 | 4.4 | 54 | 12 | 100 | 65 | 66 | 30 | 37 | 15 | 2.6 | 2.8 |
| 9 | 1.2 | 6.7 | 47 | 11 | 100 | 61 | 66 | 27 | 43 | 12 | 2.6 | 6.9 |
| 10 | 1.1 | 20 | 40 | 11 | 300 | 58 | 72 | 25 | 37 | 11 | 2.3 | 4.7 |
| 11 | 1.1 | 17 | 38 | 10 | 1500 | 57 | 62 | 28 | 45 | 8.6 | 2.0 | 3.1 |
| 12 | 1.2 | 12 | 35 | 9.4 | 600 | 53 | 58 | 421 | 28 | 7.3 | 1.9 | 2.6 |
| 13 | 1.2 | 11 | 35 | 9.0 | 230 | 53 | 51 | 278 | 45 | 6.6 | 2.0 | 2.3 |
| 14 | 1.2 | 11 | 33 | 8.4 | 160 | 50 | 58 | 177 | 76 | 5.9 | 1.9 | 2.3 |
| 15 | 1.2 | 10 | 32 | 8.0 | 160 | 45 | 58 | 165 | 68 | 5.3 | 1.9 | 3.5 |
| 16 | 1.2 | 8.8 | 31 | 8.0 | 150 | 40 | 48 | 213 | 114 | 4.7 | 3.1 | 3.7 |
| 17 | 1.2 | 5.8 | 30 | 8.0 | 160 | 37 | 47 | 145 | 62 | 4.0 | 2.9 | 2.8 |
| 18 | 1.4 | 5.8 | 28 | 7.8 | 170 | 35 | 51 | 116 | 47 | 4.0 | 2.1 | 2.6 |
| 19 | 1.8 | 6.0 | 27 | 7.6 | 180 | 35 | 43 | 99 | 37 | 3.7 | 1.6 | 2.8 |
| 20 | 1.9 | 6.0 | 25 | 7.4 | 521 | 35 | 40 | 86 | 35 | 7.7 | 1.4 | 2.8 |
| 21 | 1.7 | 6.4 | 24 | 7.4 | 493 | 35 | 35 | 72 | 55 | 17 | 1.2 | 2.6 |
| 22 | 1.7 | 6.6 | 23 | 7.6 | 336 | 35 | 32 | 62 | 53 | 11 | 1.2 | 3.5 |
| 23 | 1.6 | 7.0 | 22 | 7.6 | 240 | 35 | 35 | 53 | 37 | 7.7 | 1.2 | 13 |
| 24 | 1.5 | 35 | 21 | 7.6 | 403 | 34 | 64 | 45 | 29 | 5.3 | 1.1 | 28 |
| 25 | 9.8 | 116 | 20 | 7.6 | 244 | 34 | 53 | 39 | 34 | 4.2 | 1.2 | 21 |
| 26 | 63 | 66 | 19 | 7.2 | 209 | 34 | 45 | 35 | 47 | 4.0 | 1.2 | 12 |
| 27 | 22 | 44 | 19 | 7.0 | 174 | 42 | 39 | 31 | 31 | 5.6 | 1.1 | 8.6 |
| 28 | 14 | 41 | 19 | 7.0 | 156 | 40 | 36 | 28 | 23 | 4.5 | 1.1 | 12 |
| 29 | 12 | 48 | 19 | 6.8 | --- | 45 | 49 | 101 | 18 | 5.0 | 1.2 | 10 |
| 30 | 9.9 | 39 | 19 | 6.8 | --- | 58 | 68 | 120 | 16 | 4.5 | 1.4 | 7.7 |
| 31 | 7.7 | --- | 19 | 6.8 | --- | 69 | --- | 217 | --- | 3.7 | 1.7 | --- |
| TOTAL | 172.5 | 571.9 | 1008 | 302.0 | 7643.0 | 1780 | 1799 | 2892 | 1499 | 336.3 | 60.6 | 185.6 |
| MEAN | 5.56 | 19.1 | 32.5 | 9.74 | 273 | 57.4 | 60.0 | 93.3 | 50.0 | 10.8 | 1.95 | 6.19 |
| MAX | 63 | 116 | 79 | 18 | 1500 | 153 | 135 | 421 | 114 | 43 | 3.1 | 28 |
| MIN | 1.1 | 4.4 | 19 | 6.8 | 7.0 | 34 | 32 | 25 | 16 | 3.7 | 1.1 | 1.5 |
| CFSM | .13 | .43 | .73 | .22 | 6.12 | 1.29 | 1.35 | 2.09 | 1.12 | .24 | .04 | .14 |
| IN. | .14 | .48 | .84 | .25 | 6.37 | 1.48 | 1.50 | 2.41 | 1.25 | .28 | .05 | .15 |

CAL YR 1980 TOTAL 17399.11 MEAN 47.5 MAX 1890 MIN .53 CFSM 1.07 IN 14.51
WTR YR 1981 TOTAL 18249.90 MEAN 50.0 MAX 1500 MIN 1.1 CFSM 1.12 IN 15.22

## 01350355 SCHOHARIE CREEK AT BREAKABEEN, NY

LOCATION.--Lat 42°32'10", long 74°24'40", Schoharie County, Hydrologic Unit 02020005, on left bank 100 ft (30 m) downstream from bridge on State Highway 30, 0.9 mi (1.4 km) north of Breakabeen, and 1.1 mi (1.8 km) downstream from Keyser Kill.

DRAINAGE AREA.--443 mi$^2$ (1,147 km$^2$).

PERIOD OF RECORD.--July 1975 to current year.

REVISED RECORDS.--WDR NY-79-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 700 ft (213.4 m), from topographic map.

REMARKS.--Records poor. Regulation of flow by Blenheim-Gilboa Pumped Storage Project. Entire flow, runoff from 314 mi$^2$ (813 km$^2$), except for periods of spill, diverted from Schoharie Reservoir through Shandaken Tunnel into Esopus Creek upstream from Ashokan Reservoir for water supply of City of New York. For periods of spill see station 01350101.

AVERAGE DISCHARGE.--6 years, 648 ft$^3$/s (18.35 m$^3$/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,000 ft$^3$/s (1,359 m$^3$/s) revised, Mar. 21, 1980, gage height, 18.34 ft (5.590 m) from floodmarks from rating curve extended above 11,000 ft$^3$/s (311 m$^3$/s); minimum, 1.7 ft$^3$/s (0.05 m$^3$/s) Oct. 14, 1980, minimum gage height, 1.37 ft (0.418 m), Aug. 22, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,600 ft$^3$/s (300 m$^3$/s) Feb. 21, gage height, 7.75 ft (2.362 m), minimum, 1.7 ft$^3$/s (0.05 m$^3$/s) Oct. 14; minimum daily 7.1 ft$^3$/s (0.20 m$^3$/s) Oct. 1, 2, 10, minimum gage height, 1.37 ft (0.418 m) Aug. 22.

REVISIONS.--The maximum discharge for water year 1980 has been revised to 48,000 ft$^3$/s (1,359 m$^3$/s) Mar. 21, 1980, gage height 18.34 ft (5.590 m), superseding figures published in the report for 1980.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 7.1 | 23 | 68 | 29 | 20 | 858 | 157 | 129 | 164 | 35 | 24 | 13 |
| 2 | 7.1 | 22 | 78 | 27 | 800 | 510 | 348 | 114 | 98 | 41 | 21 | 20 |
| 3 | 8.3 | 21 | 112 | 25 | 350 | 370 | 204 | 96 | 78 | 73 | 19 | 17 |
| 4 | 9.8 | 21 | 79 | 25 | 170 | 278 | 176 | 81 | 74 | 85 | 18 | 21 |
| 5 | 9.3 | 21 | 62 | 24 | 150 | 235 | 176 | 70 | 64 | 219 | 19 | 18 |
| 6 | 9.3 | 21 | 58 | 23 | 160 | 167 | 227 | 73 | 53 | 186 | 19 | 15 |
| 7 | 8.3 | 20 | 50 | 22 | 150 | 154 | 164 | 83 | 50 | 86 | 18 | 14 |
| 8 | 8.3 | 19 | 62 | 22 | 120 | 223 | 151 | 78 | 47 | 58 | 19 | 15 |
| 9 | 7.5 | 21 | 64 | 21 | 240 | 215 | 146 | 59 | 54 | 47 | 21 | 21 |
| 10 | 7.1 | 29 | 60 | 20 | 130 | 129 | 157 | 54 | 48 | 40 | 19 | 19 |
| 11 | 8.3 | 32 | 60 | 19 | 1200 | 122 | 167 | 62 | 48 | 36 | 14 | 15 |
| 12 | 9.8 | 28 | 58 | 18 | 450 | 140 | 135 | 1430 | 39 | 31 | 13 | 13 |
| 13 | 9.3 | 25 | 56 | 18 | 350 | 146 | 129 | 978 | 47 | 30 | 13 | 12 |
| 14 | 9.8 | 24 | 52 | 18 | 320 | 135 | 109 | 517 | 90 | 27 | 13 | 12 |
| 15 | 11 | 24 | 50 | 17 | 300 | 146 | 149 | 370 | 154 | 24 | 13 | 13 |
| 16 | 12 | 24 | 50 | 16 | 250 | 176 | 109 | 625 | 247 | 23 | 15 | 14 |
| 17 | 13 | 22 | 48 | 16 | 300 | 107 | 105 | 375 | 149 | 21 | 14 | 13 |
| 18 | 9.8 | 25 | 46 | 16 | 400 | 81 | 143 | 273 | 112 | 21 | 13 | 13 |
| 19 | 10 | 24 | 44 | 16 | 585 | 81 | 114 | 231 | 74 | 21 | 12 | 13 |
| 20 | 7.5 | 27 | 43 | 16 | 2130 | 76 | 92 | 197 | 65 | 23 | 11 | 13 |
| 21 | 8.3 | 24 | 41 | 16 | 8700 | 86 | 79 | 170 | 100 | 47 | 11 | 12 |
| 22 | 10 | 25 | 40 | 16 | 7010 | 79 | 71 | 143 | 164 | 50 | 8.8 | 12 |
| 23 | 11 | 24 | 38 | 16 | 3960 | 90 | 73 | 117 | 94 | 36 | 12 | 18 |
| 24 | 12 | 38 | 36 | 16 | 7640 | 96 | 143 | 100 | 68 | 29 | 14 | 30 |
| 25 | 24 | 146 | 34 | 16 | 4250 | 85 | 151 | 88 | 65 | 26 | 14 | 33 |
| 26 | 74 | 112 | 33 | 16 | 2540 | 78 | 109 | 98 | 86 | 25 | 14 | 21 |
| 27 | 47 | 81 | 32 | 16 | 1470 | 86 | 86 | 79 | 66 | 29 | 13 | 16 |
| 28 | 34 | 76 | 32 | 16 | 955 | 86 | 79 | 49 | 53 | 26 | 13 | 16 |
| 29 | 28 | 81 | 31 | 16 | --- | 92 | 90 | 83 | 59 | 28 | 12 | 19 |
| 30 | 26 | 74 | 31 | 16 | --- | 117 | 183 | 127 | 45 | 25 | 13 | 17 |
| 31 | 24 | --- | 30 | 16 | --- | 170 | --- | 265 | --- | 24 | 13 | --- |
| TOTAL | 480.9 | 1154 | 1578 | 584 | 45100 | 5414 | 4222 | 7214 | 2555 | 1472 | 465.8 | 498 |
| MEAN | 15.5 | 38.5 | 50.9 | 18.8 | 1611 | 175 | 141 | 233 | 85.2 | 47.5 | 15.0 | 16.6 |
| MAX | 74 | 146 | 112 | 29 | 8700 | 858 | 348 | 1430 | 247 | 219 | 24 | 33 |
| MIN | 7.1 | 19 | 30 | 16 | 20 | 76 | 71 | 49 | 39 | 21 | 8.8 | 12 |

CAL YR 1980 TOTAL 152023.8 MEAN 415 MAX 22000 MIN 5.8
WTR YR 1981 TOTAL 70737.7 MEAN 194 MAX 8700 MIN 7.1

## 01351500 SCHOHARIE CREEK AT BURTONSVILLE, NY

LOCATION.--Lat 42°48'00", long 74°15'48", Schenectady County, Hydrologic Unit 02020005, on right bank 0.4 mi (0.6 km) south of Burtonsville, 2.7 mi (4.3 km) north of Esperance, and 13.5 mi (21.7 km) upstream from mouth.

DRAINAGE AREA.--883 mi$^2$ (2,287 km$^2$).

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 507.98 ft (154.832 m) National Geodetic Vertical Datum of 1929, unadjusted.

REMARKS.--Records fair except those for winter periods, which are poor. Regulation of flow by Blenheim-Gilboa Pumped Storage Project. Entire flow, runoff from 314 mi$^2$ (813 km$^2$), except for periods of spill, diverted from Schoharie Reservoir through Shandaken Tunnel into Esopus Creek upstream from Ashokan Reservoir for water supply of City of New York. For periods of spill see station 01350101.

AVERAGE DISCHARGE.--42 years, 477 ft$^3$/s (13.51 m$^3$/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 76,500 ft$^3$/s (2,170 m$^3$/s) Oct. 16, 1955, gage height, 12.39 ft (3.776 m); minimum, 2.4 ft$^3$/s (0.068 m$^3$/s) Sept. 24, 25, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of March 1936 and September 1938 reached stages of 10.5 (3.20 m) and 10.2 ft (3.11 m), respectively, from information furnished by local resident. However, flood of October 1903 is known to have reached a higher stage than the 1936 or 1938 flood.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16,700 ft$^3$/s (473 m$^3$/s) Feb. 21, gage height, 5.44 ft (1.658 m); minimum, 18 ft$^3$/s (0.51 m$^3$/s) Oct. 14, gage height, 0.60 ft (0.183 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 35 | 76 | 357 | 100 | 100 | 1960 | 449 | 327 | 413 | 120 | 70 | 29 |
| 2 | 35 | 71 | 357 | 100 | 1400 | 1620 | 964 | 256 | 248 | 122 | 63 | 28 |
| 3 | 36 | 65 | 501 | 96 | 2500 | 1180 | 929 | 234 | 206 | 191 | 57 | 33 |
| 4 | 39 | 61 | 379 | 88 | 1500 | 855 | 645 | 213 | 187 | 224 | 55 | 52 |
| 5 | 37 | 59 | 327 | 84 | 1000 | 817 | 570 | 193 | 175 | 335 | 58 | 55 |
| 6 | 34 | 56 | 290 | 80 | 1000 | 661 | 661 | 175 | 153 | 2080 | 64 | 48 |
| 7 | 31 | 53 | 270 | 78 | 1000 | 556 | 556 | 170 | 158 | 777 | 58 | 50 |
| 8 | 28 | 52 | 260 | 76 | 1000 | 542 | 449 | 164 | 139 | 424 | 54 | 58 |
| 9 | 26 | 51 | 250 | 74 | 1000 | 599 | 402 | 153 | 134 | 296 | 51 | 98 |
| 10 | 22 | 71 | 240 | 72 | 1100 | 542 | 437 | 134 | 153 | 234 | 47 | 116 |
| 11 | 21 | 88 | 220 | 70 | 2500 | 514 | 402 | 125 | 139 | 189 | 44 | 87 |
| 12 | 21 | 92 | 220 | 68 | 7760 | 488 | 402 | 1420 | 125 | 158 | 41 | 67 |
| 13 | 21 | 84 | 210 | 66 | 2530 | 475 | 327 | 3970 | 112 | 141 | 39 | 54 |
| 14 | 20 | 77 | 200 | 66 | 1550 | 488 | 298 | 1810 | 170 | 135 | 36 | 47 |
| 15 | 19 | 72 | 190 | 66 | 1000 | 402 | 347 | 1100 | 462 | 121 | 35 | 59 |
| 16 | 20 | 69 | 180 | 64 | 720 | 400 | 317 | 1280 | 983 | 106 | 37 | 54 |
| 17 | 20 | 60 | 170 | 64 | 1000 | 350 | 263 | 1080 | 584 | 96 | 34 | 49 |
| 18 | 21 | 68 | 170 | 64 | 2300 | 298 | 271 | 728 | 357 | 88 | 33 | 45 |
| 19 | 21 | 66 | 160 | 64 | 2710 | 289 | 280 | 570 | 298 | 86 | 31 | 45 |
| 20 | 21 | 70 | 150 | 64 | 4930 | 263 | 241 | 462 | 248 | 111 | 30 | 42 |
| 21 | 21 | 70 | 150 | 64 | 12000 | 226 | 220 | 379 | 271 | 141 | 28 | 40 |
| 22 | 20 | 75 | 150 | 64 | 8560 | 241 | 200 | 317 | 361 | 199 | 27 | 48 |
| 23 | 20 | 79 | 140 | 64 | 5570 | 234 | 187 | 263 | 334 | 165 | 26 | 136 |
| 24 | 19 | 114 | 140 | 64 | 8310 | 248 | 256 | 226 | 239 | 121 | 25 | 206 |
| 25 | 29 | 929 | 130 | 64 | 6510 | 256 | 368 | 206 | 196 | 98 | 23 | 293 |
| 26 | 170 | 855 | 120 | 64 | 4470 | 256 | 298 | 181 | 208 | 86 | 22 | 209 |
| 27 | 256 | 462 | 120 | 64 | 3270 | 256 | 241 | 175 | 211 | 86 | 23 | 157 |
| 28 | 165 | 379 | 110 | 64 | 2330 | 271 | 213 | 158 | 173 | 83 | 23 | 395 |
| 29 | 124 | 450 | 110 | 64 | --- | 271 | 213 | 134 | 144 | 88 | 25 | 232 |
| 30 | 99 | 462 | 110 | 64 | --- | 317 | 289 | 200 | 135 | 91 | 29 | 155 |
| 31 | 85 | --- | 100 | 66 | --- | 413 | --- | 317 | --- | 80 | 31 | --- |
| TOTAL | 1536 | 5236 | 6481 | 2210 | 89620 | 16288 | 11695 | 17120 | 7716 | 7272 | 1219 | 2987 |
| MEAN | 49.5 | 175 | 209 | 71.3 | 3201 | 525 | 390 | 552 | 257 | 235 | 39.3 | 99.6 |
| MAX | 256 | 929 | 501 | 100 | 12000 | 1960 | 964 | 3970 | 983 | 2080 | 70 | 395 |
| MIN | 19 | 51 | 100 | 64 | 100 | 226 | 187 | 125 | 112 | 80 | 22 | 28 |

CAL YR 1980 TOTAL 295324 MEAN 807 MAX 40300 MIN 17
WTR YR 1981 TOTAL 169380 MEAN 464 MAX 12000 MIN 19

## 01354490 MOHAWK RIVER AT SCHENECTADY, NY

LOCATION.--Lat 42°49'06", long 73°57'04", Schenectady County, Hydrologic Unit 02020004, at new (1977) Schenectady-Scotia bridge, 0.5 mi (0.8 km) upstream from railroad bridge, and 1.0 mi (1.6 km) upstream from Collins Creek.

DRAINAGE AREA.--3,302 mi² (8,552 km²).

PERIOD OF RECORD.--April 1969 to September 1981 (discontinued).
CHEMICAL DATA: 1969 (d), 1970-72 (e), 1973 (d), 1974 (e), 1975 (d), 1976-77 (b), 1978-81 (d).
MINOR ELEMENTS DATA: 1972 (c), 1973 (b), 1974-75 (d), 1976-77 (c), 1978-79 (d), 1980 (c), 1981 (d).
ORGANIC DATA: OC--1974 (c), 1975 (d), 1976-77 (c), 1978-79 (d).
NUTRIENT DATA: 1969 (d), 1970-74 (e), 1975 (d), 1976-77 (c), 1978-81 (d).
BIOLOGICAL DATA:
Bacteria--1977 (c), 1978-81 (d).

REMARKS.--Water-discharge data are based on records for 01357499 diversion from Mohawk River at Crescent Dam, and 01357500 Mohawk River at Cohoes. Prior to January 1977, sampling site was 0.2 mi (0.3 km) upstream.

### WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | TIME | DIS-CHARGE, IN CUBIC FEET PER SECOND | SPE-CIFIC CON-DUCT-ANCE (UMHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | BARO-METRIC PRES-SURE (MM OF HG) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) | COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | |
| 28... | 1200 | 5360 | 250 | 7.2 | 7.5 | 754 | 11.9 | 103 | -- | K1500 |
| NOV | | | | | | | | | | |
| 19... | 1200 | 2810 | 227 | 7.3 | 2.5 | 760 | 13.5 | 102 | 75 | 140 |
| DEC | | | | | | | | | | |
| 04... | 1000 | 11300 | 237 | 7.5 | .5 | 768 | 13.5 | 96 | 35 | K900 |
| FEB | | | | | | | | | | |
| 26... | 1200 | 25300 | 151 | 7.2 | 2.5 | 758 | 12.1 | 92 | 62 | 1000 |
| MAR | | | | | | | | | | |
| 12... | 1100 | 5020 | 248 | 6.9 | 2.5 | 753 | 12.9 | 99 | 72 | 390 |
| 31... | 1200 | 3540 | 264 | 6.9 | 10.5 | 759 | -- | -- | -- | 560 |
| APR | | | | | | | | | | |
| 29... | 1200 | 3240 | 200 | 8.7 | 10.0 | 747 | -- | -- | 23 | 210 |
| MAY | | | | | | | | | | |
| 13... | 1300 | 12200 | 231 | 8.1 | 15.0 | 756 | 9.5 | 98 | -- | K2400 |
| JUN | | | | | | | | | | |
| 10... | 0900 | 1550 | 304 | 7.0 | 21.5 | 748 | 7.5 | 88 | <10 | K20 |
| JUL | | | | | | | | | | |
| 08... | 0900 | 2280 | 303 | 6.8 | 24.5 | 758 | 7.8 | 96 | 94 | K15 |
| AUG | | | | | | | | | | |
| 04... | 0930 | 1180 | 312 | 7.0 | 24.5 | 758 | 7.0 | 85 | -- | 1100 |
| SEP | | | | | | | | | | |
| 02... | 0900 | 1590 | 296 | 6.8 | 22.0 | 761 | 8.7 | 100 | 47 | 1200 |

| DATE | SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) | NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) | NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) | NITRO-GEN, TOTAL (MG/L AS N) | PHOS-PHORUS, TOTAL (MG/L AS P) | NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) | SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) | ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) | CYANIDE TOTAL (MG/L AS CN) |
|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | |
| 28... | 37 | .57 | .54 | 1.1 | .070 | 4 | 0 | 40 | .00 |
| NOV | | | | | | | | | |
| 19... | 60 | .56 | .65 | 1.2 | .040 | 5 | 0 | 20 | .00 |
| DEC | | | | | | | | | |
| 04... | 78 | .73 | .86 | 1.6 | .220 | 8 | 1 | 40 | .00 |
| FEB | | | | | | | | | |
| 26... | 44 | .92 | <.10 | -- | .070 | 3 | 0 | 50 | <.01 |
| MAR | | | | | | | | | |
| 12... | 28 | .97 | .61 | 1.6 | .030 | 0 | 0 | 50 | <.01 |
| 31... | 6 | .78 | .94 | 1.7 | .040 | 0 | 0 | 10 | <.01 |
| APR | | | | | | | | | |
| 29... | 23 | .64 | .62 | 1.3 | .060 | 3 | 0 | 10 | <.01 |
| MAY | | | | | | | | | |
| 13... | 47 | .63 | 1.10 | 1.7 | .130 | 0 | 0 | 50 | <.01 |
| JUN | | | | | | | | | |
| 10... | 20 | .63 | 1.10 | 1.7 | .030 | 6 | 0 | 20 | <.01 |
| JUL | | | | | | | | | |
| 08... | 25 | 1.0 | .56 | 1.6 | .060 | 120 | <1 | 20 | <.01 |
| AUG | | | | | | | | | |
| 04... | 27 | 1.0 | .85 | 1.9 | .090 | <100 | 1 | 30 | <.01 |
| SEP | | | | | | | | | |
| 02... | 19 | .86 | .70 | 1.6 | .030 | <100 | <1 | 30 | <.01 |

## 01357500 MOHAWK RIVER AT COHOES, NY

LOCATION.--Lat 42°47'07", long 73°42'29", Albany County, Hydrologic Unit 02020004, on right bank at Niagara Mohawk Power Corp. School Street powerplant in Cohoes, and 2.0 mi (3.2 km) upstream from mouth.

DRAINAGE AREA.--3,456 mi² (8,951 km²).

PERIOD OF RECORD.--December 1917 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to July 17, 1925, published as "at Crescent Dam".

REVISED RECORDS.--WSP 741: Drainage area. WSP 1302: 1919-23 (M).

GAGE.--Water-stage recorder. Datum of gage is 49.13 ft (14.975 m) National Geodetic Vertical Datum of 1929. Dec. 1, 1917, to July 16, 1925, water-stage recorder at site 1.7 mi (2.74 km) upstream at Crescent Dam at datum 130.87 ft (39.889 m) higher. July 17 to Oct. 19, 1925, powerplant gage at present site.

REMARKS.--Records good except those for winter periods, which are poor. Total flow of Mohawk River equals flow published at Cohoes which includes small diversion for Cohoes water supply plus flow diverted at Cresent Dam to Barge Canal through Lock 6. Prior to 1925 records published as total flow. See Diversions in Hudson River Basin for regulation and diversions upstream from this station.

COOPERATION.--Diversions through Barge Canal at Lock 6 furnished by New York State Department of Transportation.

AVERAGE DISCHARGE.--7 years (1919-25), 5,820 ft³/s (164.8 m³/s), includes diversion at Lock 6; 56 years (1926-81), 5,701 ft³/s (161.5 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 143,000 ft³/s (4,050 m³/s) Mar. 6, 1964, result of release from ice jam, gage height, 23.15 ft (7.056 m), from rating curve extended above 100,000 ft³/s (2,830 m³/s); minimum, 6 ft³/s (0.17 m³/s) Sept. 18, 1941, gage height, 3.40 ft (1.036 m); minimum daily, 23 ft³/s (0.65 m³/s) Aug. 24, 1941.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 41,000 ft³/s (1,160 m³/s):

| Date | Time | Discharge (ft³/s) | Discharge (m³/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|
| Feb. 21 | 1500 | 53,100 | 1,504 | 18.09 | 5.514 |

Minimum discharge, 148 ft³/s (4.19 m³/s) June 24, gage height, 4.75 ft (1.448 m); minimum daily, 546 ft³/s (15.46 m³/s) July 19.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1250 | 2050 | 5120 | 2690 | 1590 | 11000 | 6400 | 3920 | 1840 | 1620 | 2100 | 971 |
| 2 | 1440 | 2420 | 6460 | 2690 | 1900 | 10300 | 8010 | 3140 | 2140 | 1990 | 1330 | 1460 |
| 3 | 1330 | 2400 | 11800 | 2400 | 2710 | 8560 | 10600 | 3070 | 2040 | 1910 | 1290 | 1360 |
| 4 | 1360 | 2480 | 11200 | 2100 | 5280 | 6930 | 8220 | 3010 | 1730 | 1780 | 1060 | 3860 |
| 5 | 1350 | 2590 | 6630 | 1700 | 4720 | 6200 | 6830 | 2550 | 1670 | 2380 | 1240 | 4040 |
| 6 | 1190 | 2530 | 3960 | 1400 | 4020 | 5790 | 5730 | 2950 | 1630 | 2380 | 1940 | 2080 |
| 7 | 1580 | 2560 | 3890 | 1550 | 3630 | 5400 | 5360 | 2500 | 1300 | 3080 | 1990 | 1450 |
| 8 | 1110 | 2650 | 3700 | 1500 | 2790 | 4990 | 4750 | 2250 | 1220 | 2150 | 1700 | 1610 |
| 9 | 1110 | 2800 | 4660 | 1500 | 2680 | 4810 | 4530 | 2280 | 1940 | 1940 | 1670 | 5000 |
| 10 | 1200 | 5480 | 7000 | 1600 | 2460 | 5040 | 4340 | 1940 | 1440 | 1520 | 1450 | 5580 |
| 11 | 1210 | 4220 | 6740 | 1550 | 2700 | 4850 | 3980 | 2880 | 1710 | 1150 | 1700 | 2760 |
| 12 | 1070 | 3700 | 4990 | 1900 | 12700 | 5020 | 3550 | 3910 | 1400 | 918 | 1050 | 2560 |
| 13 | 1050 | 2880 | 4090 | 2100 | 18800 | 4900 | 3540 | 12100 | 1160 | 1300 | 1270 | 3000 |
| 14 | 993 | 3220 | 3830 | 1900 | 12500 | 4560 | 3410 | 7520 | 1470 | 1260 | 1270 | 2430 |
| 15 | 923 | 2720 | 3180 | 1600 | 9240 | 4360 | 2970 | 5470 | 1780 | 1090 | 1340 | 2540 |
| 16 | 928 | 2530 | 2750 | 2450 | 7700 | 4190 | 3760 | 5690 | 2940 | 1130 | 1710 | 2560 |
| 17 | 978 | 2680 | 2490 | 2300 | 6370 | 4490 | 3020 | 6530 | 4030 | 1070 | 2110 | 1720 |
| 18 | 1070 | 2450 | 2460 | 1950 | 9210 | 4030 | 3640 | 6110 | 5000 | 810 | 2860 | 1330 |
| 19 | 783 | 2660 | 2600 | 2600 | 15500 | 3480 | 6330 | 4530 | 3050 | 546 | 2140 | 1810 |
| 20 | 1760 | 2820 | 2520 | 2800 | 22200 | 3350 | 6230 | 3300 | 2960 | 1260 | 1280 | 1540 |
| 21 | 1950 | 2790 | 2460 | 2250 | 41700 | 3270 | 3020 | 3550 | 2860 | 1360 | 1580 | 2000 |
| 22 | 1710 | 2610 | 2320 | 2150 | 45700 | 3080 | 4330 | 3460 | 2510 | 1860 | 1210 | 5740 |
| 23 | 1380 | 2640 | 1810 | 2800 | 32100 | 2990 | 2090 | 2440 | 2350 | 2390 | 1190 | 14700 |
| 24 | 1470 | 2770 | 2600 | 2650 | 28600 | 3120 | 1630 | 1630 | 2100 | 1540 | 793 | 12700 |
| 25 | 1930 | 9510 | 2660 | 2200 | 33200 | 3330 | 3690 | 1890 | 2940 | 782 | 718 | 10200 |
| 26 | 5430 | 9050 | 2750 | 2900 | 25300 | 3320 | 5150 | 2160 | 2540 | 1030 | 1080 | 5190 |
| 27 | 8970 | 5340 | 2500 | 3000 | 17900 | 3390 | 4510 | 2170 | 3540 | 1450 | 1670 | 4940 |
| 28 | 5260 | 4540 | 2400 | 2350 | 13500 | 3300 | 4160 | 2100 | 1880 | 1340 | 971 | 4300 |
| 29 | 2680 | 4410 | 2700 | 2300 | --- | 3150 | 3120 | 1950 | 1760 | 2170 | 581 | 5850 |
| 30 | 2970 | 5390 | 3000 | 2250 | --- | 3040 | 2330 | 1710 | 1610 | 2370 | 1260 | 4130 |
| 31 | 2890 | --- | 2760 | 1670 | --- | 3540 | --- | 1850 | --- | 2280 | 1370 | --- |
| TOTAL | 60325 | 107690 | 128030 | 66800 | 386700 | 147780 | 139230 | 110560 | 66540 | 49856 | 44923 | 119411 |
| MEAN | 1946 | 3590 | 4130 | 2155 | 13810 | 4767 | 4641 | 3566 | 2218 | 1608 | 1449 | 3980 |
| MAX | 8970 | 9510 | 11800 | 3000 | 45700 | 11000 | 10600 | 12100 | 5000 | 3080 | 2860 | 14700 |
| MIN | 783 | 2400 | 1810 | 1400 | 1590 | 2990 | 1630 | 1630 | 1160 | 546 | 581 | 971 |

CAL YR 1980 TOTAL 1484535 MEAN 4056 MAX 79100 MIN 604
WTR YR 1981 TOTAL 1427845 MEAN 3912 MAX 45700 MIN 546

## 01357500 MOHAWK RIVER AT COHOES, NY--Continued

(01357499) Diversion, in cubic feet per second, from Mohawk River at Cresent Dam, NY, through Barge Canal at lock 6, water year October 1980 to September 1981

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 128 | 104 | 104 | 3.0 | 3.0 | 3.0 | 3.0 | 122 | 164 | 146 | 140 | 122 |
| 2 | 134 | 116 | 92 | 3.0 | 3.0 | 3.0 | 3.0 | 122 | 146 | 128 | 152 | 128 |
| 3 | 152 | 98 | 104 | 3.0 | 3.0 | 3.0 | 3.0 | 116 | 128 | 134 | 152 | 152 |
| 4 | 116 | 122 | 104 | 3.0 | 3.0 | 3.0 | 3.0 | 116 | 116 | 152 | 116 | 110 |
| 5 | 152 | 110 | 110 | 3.0 | 3.0 | 3.0 | 3.0 | 128 | 116 | 140 | 128 | 140 |
| 6 | 134 | 104 | 92 | 3.0 | 3.0 | 3.0 | 3.0 | 122 | 116 | 146 | 164 | 140 |
| 7 | 122 | 104 | 78 | 3.0 | 3.0 | 3.0 | 3.0 | 98 | 128 | 122 | 140 | 158 |
| 8 | 116 | 98 | 78 | 3.0 | 3.0 | 3.0 | 3.0 | 122 | 104 | 134 | 122 | 116 |
| 9 | 122 | 110 | 78 | 3.0 | 3.0 | 3.0 | 3.0 | 140 | 146 | 122 | 134 | 116 |
| 10 | 122 | 104 | 78 | 3.0 | 3.0 | 3.0 | 3.0 | 146 | 110 | 128 | 146 | 140 |
| 11 | 128 | 98 | 78 | 3.0 | 3.0 | 3.0 | 3.0 | 128 | 134 | 128 | 122 | 140 |
| 12 | 146 | 98 | 78 | 3.0 | 3.0 | 3.0 | 3.0 | 110 | 110 | 140 | 146 | 146 |
| 13 | 122 | 98 | 78 | 3.0 | 3.0 | 3.0 | 3.0 | 122 | 134 | 110 | 146 | 116 |
| 14 | 110 | 104 | 78 | 3.0 | 3.0 | 3.0 | 3.0 | 122 | 116 | 146 | 152 | 128 |
| 15 | 116 | 104 | 78 | 3.0 | 3.0 | 3.0 | 3.0 | 134 | 122 | 140 | 140 | 110 |
| 16 | 134 | 92 | 3.0 | 3.0 | 3.0 | 3.0 | 104 | 116 | 146 | 116 | 122 | 146 |
| 17 | 122 | 98 | 3.0 | 3.0 | 3.0 | 3.0 | 92 | 110 | 128 | 134 | 146 | 122 |
| 18 | 128 | 92 | 3.0 | 3.0 | 3.0 | 3.0 | 92 | 116 | 104 | 128 | 116 | 146 |
| 19 | 122 | 146 | 3.0 | 3.0 | 3.0 | 3.0 | 92 | 122 | 116 | 152 | 122 | 110 |
| 20 | 110 | 104 | 3.0 | 3.0 | 3.0 | 3.0 | 92 | 146 | 128 | 134 | 122 | 116 |
| 21 | 128 | 104 | 3.0 | 3.0 | 3.0 | 3.0 | 92 | 134 | 128 | 152 | 134 | 116 |
| 22 | 116 | 104 | 3.0 | 3.0 | 3.0 | 3.0 | 98 | 128 | 134 | 128 | 152 | 128 |
| 23 | 128 | 104 | 3.0 | 3.0 | 3.0 | 3.0 | 98 | 122 | 140 | 152 | 140 | 116 |
| 24 | 134 | 110 | 3.0 | 3.0 | 3.0 | 3.0 | 98 | 146 | 116 | 128 | 146 | 128 |
| 25 | 104 | 92 | 3.0 | 3.0 | 3.0 | 3.0 | 92 | 140 | 116 | 152 | 134 | 116 |
| 26 | 110 | 116 | 3.0 | 3.0 | 3.0 | 3.0 | 92 | 128 | 116 | 134 | 134 | 140 |
| 27 | 122 | 98 | 3.0 | 3.0 | 3.0 | 3.0 | 146 | 122 | 122 | 152 | 122 | 128 |
| 28 | 104 | 98 | 3.0 | 3.0 | 3.0 | 3.0 | 110 | 122 | 128 | 140 | 122 | 128 |
| 29 | 122 | 98 | 3.0 | 3.0 | --- | 3.0 | 116 | 152 | 140 | 128 | 134 | 128 |
| 30 | 98 | 98 | 3.0 | 3.0 | --- | 3.0 | 134 | 122 | 152 | 158 | 116 | 116 |
| 31 | 122 | --- | 3.0 | 3.0 | --- | 3.0 | --- | 128 | --- | 128 | 116 | --- |
| TOTAL | 3824 | 3126 | 1356.0 | 93.0 | 84.0 | 93.0 | 1593.0 | 3902 | 3804 | 4232 | 4178 | 3846 |
| MEAN | 123 | 104 | 43.7 | 3.00 | 3.00 | 3.00 | 53.1 | 126 | 127 | 137 | 135 | 128 |
| MAX | 152 | 146 | 110 | 3.0 | 3.0 | 3.0 | 146 | 152 | 164 | 158 | 164 | 158 |
| MIN | 98 | 92 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 98 | 104 | 110 | 116 | 110 |

CAL YR 1980 TOTAL 30440.0 MEAN 83.2 MAX 188 MIN 3.0
WTR YR 1981 TOTAL 30131.0 MEAN 82.6 MAX 164 MIN 3.0

### 01357500 MOHAWK RIVER AT COHOES, NY

REGULATION
(see Reservoirs in Hudson River Basin)

Delta Dam.
Hinckley Reservoir.
Schoharie Reservoir.

DIVERSIONS
(see Reservoirs in Hudson River Basin)

From Chenango River basin through Oriskany Creek Feeder.

From (and occasionally into) Oswego River basin through summit level of Erie (Barge) Canal between New London and Utica.

From Black River basin through Black River Canal during navigation period.

Into Esopus Creek from Schoharie Reservoir through Shandaken Tunnel for New York City water supply.

### 01358000 HUDSON RIVER AT GREEN ISLAND, NY

REGULATION

Great Sacandaga Lake at Conklingville (see station 01323500).
Indian Lake near Indian Lake (see station 01314500).
Mohawk River regulation listed under Mohawk River at Cohoes.

DIVERSIONS

Mohawk River diversions listed under Mohawk River at Cohoes.

Into St. Lawrence River basin through:
- Glens Falls feeder at Dunham Basin (see station 01327500).
- Bond Creek at Dunham Basin (see station 01328000).
- Champlain (Barge) Canal (see station 01327500).

From St. Lawrence River basin through summit level of Champlain (Barge) Canal at Dunham Basin

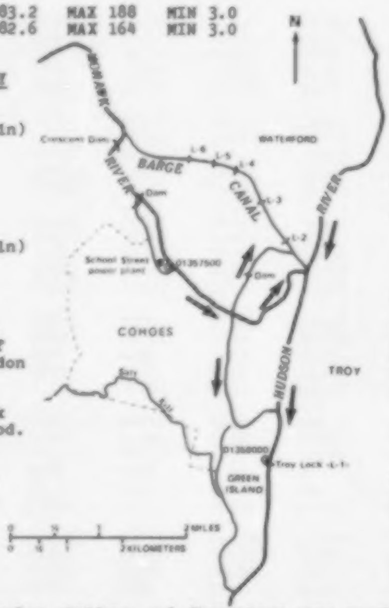


Figure 7.--Gaging stations and diversions near mouth of Mohawk River.

## 01358000 HUDSON RIVER AT GREEN ISLAND, NY

(National stream-quality accounting network station)
(National pesticide network station)
(National radiochemical network station)

LOCATION.--Lat 42°45'08", long 73°41'22", Albany County, Hydrologic Unit 02020003, on right bank at Green Island, just upstream from Troy lock and dam, and 0.5 mi (0.8 km) downstream from 5th branch Mohawk River. Water-quality sampling site at bridge on State Highway 7, 1.7 mi (2.7 km) downstream from discharge station.

DRAINAGE AREA.--8,090 mi$^2$ (20,953 km$^2$), approximately (including that above site of former auxiliary gage).

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 0.31 ft (0.094 m) below National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). From July 1, 1946 to Mar. 12, 1962 auxiliary water-stage recorder on bypass channel at datum 10.59 ft (3.228 m) higher.

REMARKS.--Records fair above 15,000 ft$^3$/s (424.8 m$^3$/s), and poor below. Records include flow over spillway, estimates of flow through lock, and flow through powerplant. Powerplant, located on right bank just downstream from gage, was inoperative from Nov. 20, 1960 to Feb. 23, 1971. See Diversions in Hudson River Basin for regulation and diversions upstream from this station.

AVERAGE DISCHARGE.--35 years, 13,710 ft$^3$/s (388.3 m$^3$/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 181,000 ft$^3$/s (5,130 m$^3$/s) Dec. 31, 1948, gage height, 27.05 ft (8.245 m), from high-water mark in gage well; maximum daily, 152,000 ft$^3$/s (4,305 m$^3$/s) Mar. 14, 1977; minimum daily, 882 ft$^3$/s (25.0 m$^3$/s) Sept. 2, 1968; minimum gage height 13.68 ft (4.170 m) July 6, 1981, when pool was lowered for inspection of flashboards.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 19, 1936, reached a stage of 29.48 ft (8.986 m) at gage on opposite bank, from information by Corps of Engineers (discharge, 215,000 ft$^3$/s or 6,090 m$^3$/s). Flood of Mar. 28, 1913, prior to construction of Sacandaga Reservoir and Troy lock and dam, reached a stage about 0.2 ft (0.06 m) higher upstream from former dam near same site. Downstream from dams, flood in 1913 was about 3.3 ft (1.01 m) higher than flood in 1936, from information by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 91,100 ft$^3$/s (2,580 m$^3$/s) Feb. 22, gage height, 22.05 ft (6.721 m); minimum daily, 2,660 ft$^3$/s (75.3 m$^3$/s) July 20; minimum gage height, 13.68 ft (4.170 m) July 6, when pool was lowered for inspection of flashboards.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4380 | 8030 | 12300 | 6210 | 5100 | 28200 | 17800 | 9940 | 6500 | 5370 | 5900 | 3840 |
| 2 | 4390 | 5990 | 12900 | 4940 | 6270 | 25100 | 21100 | 9120 | 7290 | 5430 | 4330 | 3980 |
| 3 | 4450 | 4770 | 19700 | 5960 | 16500 | 21500 | 24700 | 8420 | 7130 | 5080 | 3680 | 4320 |
| 4 | 3720 | 6640 | 20200 | 5230 | 15000 | 18400 | 20700 | 7880 | 5580 | 5120 | 3900 | 5800 |
| 5 | 3700 | 7280 | 14600 | 4000 | 12400 | 16400 | 17800 | 7570 | 5440 | 4460 | 5090 | 6090 |
| 6 | 3270 | 6850 | 10600 | 4890 | 10500 | 15200 | 18500 | 7920 | 5130 | 3920 | 5600 | 4640 |
| 7 | 4870 | 7160 | 9290 | 5210 | 9940 | 14700 | 19200 | 7440 | 5150 | 7970 | 6070 | 2860 |
| 8 | 4760 | 7140 | 8680 | 5130 | 8440 | 13500 | 16100 | 7090 | 3970 | 6660 | 4800 | 3410 |
| 9 | 4300 | 7130 | 12000 | 5680 | 7430 | 12300 | 15800 | 6670 | 6070 | 5570 | 4260 | 7070 |
| 10 | 4180 | 10800 | 15400 | 5700 | 8760 | 12100 | 14200 | 5800 | 5590 | 5170 | 4090 | 9160 |
| 11 | 4420 | 10600 | 16400 | 4820 | 9950 | 11800 | 13200 | 6490 | 5830 | 4610 | 5870 | 6240 |
| 12 | 3580 | 9730 | 11600 | 3560 | 31000 | 12300 | 10900 | 9920 | 5270 | 3880 | 4200 | 5910 |
| 13 | 5070 | 7570 | 9770 | 5060 | 30300 | 12300 | 10500 | 27400 | 5160 | 3360 | 4980 | 7280 |
| 14 | 5210 | 7660 | 9240 | 5350 | 23800 | 11900 | 10900 | 26400 | 4330 | 4160 | 4860 | 6130 |
| 15 | 4860 | 7420 | 8410 | 5840 | 20500 | 10500 | 11000 | 22300 | 4250 | 3880 | 5150 | 6660 |
| 16 | 3670 | 5970 | 8110 | 5350 | 17800 | 10100 | 11600 | 23200 | 6840 | 3730 | 5270 | 7260 |
| 17 | 3580 | 5820 | 7930 | 5650 | 17700 | 11000 | 10700 | 24200 | 7660 | 4070 | 5850 | 6090 |
| 18 | 4230 | 7010 | 7970 | 5580 | 20900 | 11200 | 11400 | 22400 | 8900 | 3800 | 6730 | 5620 |
| 19 | 2910 | 7330 | 7740 | 4220 | 27500 | 9710 | 14000 | 16300 | 6360 | 3490 | 6470 | 6180 |
| 20 | 3530 | 7670 | 7900 | 4860 | 38100 | 9180 | 14000 | 13200 | 6060 | 2660 | 5270 | 4370 |
| 21 | 5700 | 7290 | 6410 | 5670 | 78200 | 8710 | 10700 | 12200 | 5300 | 5140 | 5220 | 5130 |
| 22 | 5130 | 7190 | 5310 | 5580 | 84800 | 8600 | 12500 | 11200 | 4390 | 6110 | 4210 | 7990 |
| 23 | 5530 | 5860 | 7010 | 5380 | 65500 | 8530 | 8650 | 9510 | 6270 | 6180 | 3940 | 19900 |
| 24 | 5230 | 5450 | 7470 | 4950 | 64100 | 8360 | 8280 | 8090 | 6030 | 5170 | 3020 | 20200 |
| 25 | 5280 | 16400 | 6800 | 4630 | 71100 | 8650 | 10800 | 7210 | 6950 | 3850 | 4200 | 19600 |
| 26 | 9390 | 17900 | 4340 | 4180 | 61200 | 8030 | 12500 | 7620 | 6950 | 3770 | 4180 | 13000 |
| 27 | 16000 | 12500 | 6340 | 4940 | 44800 | 8850 | 10800 | 8510 | 8520 | 3950 | 4070 | 12700 |
| 28 | 12100 | 10900 | 5510 | 6020 | 34100 | 8880 | 11200 | 6370 | 5620 | 5090 | 4210 | 10600 |
| 29 | 8550 | 11300 | 5330 | 6320 | --- | 8000 | 9510 | 6050 | 4710 | 6710 | 3120 | 13300 |
| 30 | 8650 | 12900 | 6530 | 6120 | --- | 7540 | 8340 | 6320 | 5940 | 7550 | 4050 | 11400 |
| 31 | 8520 | --- | 6810 | 5370 | --- | 11000 | --- | 6120 | --- | 7320 | 3630 | --- |
| TOTAL | 173160 | 256260 | 298600 | 162400 | 841690 | 382540 | 407380 | 358860 | 179190 | 153230 | 146220 | 246730 |
| MEAN | 5586 | 8542 | 9632 | 5239 | 30060 | 12340 | 13580 | 11580 | 5973 | 4943 | 4717 | 8224 |
| MAX | 16000 | 17900 | 20200 | 6320 | 84800 | 28200 | 24700 | 27400 | 8900 | 7970 | 6730 | 20200 |
| MIN | 2910 | 4770 | 4340 | 3560 | 5100 | 7540 | 8280 | 5800 | 3970 | 2660 | 3020 | 2860 |

CAL YR 1980 TOTAL 3555210 MEAN 9714 MAX 97900 MIN 2100
WTR YR 1981 TOTAL 3606260 MEAN 9880 MAX 84800 MIN 2660

## 01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955 to current year.
CHEMICAL DATA: 1963 (a), 1964-65 (c), 1966-77 (d), 1978 (c), 1979-81 (d).
MINOR ELEMENTS DATA: 1970-71 (a); 1972-73, 1975-79 (b), 1980-81 (b).
RADIOCHEMICAL DATA: 1968-71 (c), 1973-75 (a), 1976 (d), 1977 (a),1978 (b), 1979-80 (a), 1981 (b).
PESTICIDE DATA: 1976-77 (b), 1978 (a), 1979 (c), 1980 (a).
ORGANIC DATA: OC--1974 (a), 1975 (c), 1976-77 (b), 1978 (a), 1979 (c), 1980-81 (d).
PCB--1978 (a), 1979 (b), 1980 (a).
NUTRIENT DATA: 1968 (b), 1969-76 (d), 1977-79 (c), 1980-81 (d).
BIOLOGICAL DATA:
Bacteria--1971 (a), 1973-74 (d), 1975 (a), 1976-78 (c), 1979-81 (d).
Phytoplankton--1975 (a), 1976-77 (c), 1978 (b), 1979-81 (c).
Periphyton--1976-77 (b), 1978 (a), 1979-80 (b).
SEDIMENT DATA: 1975 (b), 1976 (d), 1977 (b), 1978 (c), 1979-81 (d).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1964 to September 1965, once-daily measurements, unpublished.
pH: October 1964 to September 1965, once-daily measurements, unpublished.
WATER TEMPERATURES: April 1947 to September 1954, once-daily measurements, unpublished; October 1954 to September 1981 (discontinued).

REMARKS.--Daily water-temperature measurements (at 0800 hours) made at Troy lock and dam. Prior to October 1968 sampling site at old bridge on State Highway 7 about 100 ft (33 m) upstream, and between April 1971 and September 1973 sampling site at former bridge on road between Green Island and Troy at Starbuck Island. No water temperature record Dec. 18 to Mar. 31 (stream frozen during winter period) or Apr. 4 to 15, Sept. 24, 25.

COOPERATION.--Water-temperature record furnished by the Corps of Engineers.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum daily (water years 1947-76, 1978-81), 29.0°C Aug. 8, 9, 1949, July 31, 1981; minimum daily, freezing point on many days during most winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum daily, 29.0°C July 31; minimum daily, freezing point on many days during winter period.

### WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | TIME | DIS-CHARGE, IN CUBIC FEET PER SECOND | SPE-CIFIC CON-DUCT-ANCE (UMHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | TUR-BID-ITY (NTU) | BARO-METRIC PRES-SURE (MM OF HG) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) | STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) | HARD-NESS (MG/L AS CACO3) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | | | |
| 02... | 1100 | 4390 | 205 | 7.5 | 17.5 | .50 | -- | 9.0 | 93 | 480 | 31 | 75 |
| NOV | | | | | | | | | | | | |
| 04... | 1300 | 6640 | 160 | 6.2 | 7.0 | .20 | 760 | 11.8 | 110 | 390 | 39 | 64 |
| DEC | | | | | | | | | | | | |
| 02... | 1300 | 12900 | 204 | 6.7 | 3.5 | 2.7 | 760 | 11.5 | 85 | >240 | 120 | 76 |
| FEB | | | | | | | | | | | | |
| 25... | 1300 | 71100 | 150 | 7.7 | 2.5 | 7.6 | 757 | 11.7 | 89 | 860 | 520 | 55 |
| MAR | | | | | | | | | | | | |
| 11... | 1300 | 11800 | 204 | 7.4 | 3.0 | .40 | 760 | 12.0 | 92 | 100 | 78 | 74 |
| APR | | | | | | | | | | | | |
| 01... | 1200 | 17800 | 234 | 7.7 | 10.5 | 4.4 | 760 | 11.4 | 102 | 1800 | 43 | 67 |
| 28... | 1100 | 11200 | 175 | 7.2 | -- | 1.1 | -- | -- | -- | >1200 | 100 | 63 |
| MAY | | | | | | | | | | | | |
| 12... | 1100 | 9920 | 175 | 6.4 | 16.5 | -- | 757 | 8.0 | 85 | 2200 | 400 | 66 |
| JUN | | | | | | | | | | | | |
| 09... | 1100 | 6070 | 195 | 6.6 | 21.5 | 2.6 | 746 | 7.6 | 89 | 980 | 140 | 73 |
| JUL | | | | | | | | | | | | |
| 07... | 1100 | 7970 | 229 | 7.0 | 25.5 | 2.4 | 761 | 7.6 | 94 | K330 | K88 | 90 |
| AUG | | | | | | | | | | | | |
| 05... | 1030 | 5090 | 172 | 6.8 | 26.0 | 2.5 | 758 | 7.2 | 89 | 2400 | K300 | 66 |
| SEP | | | | | | | | | | | | |
| 01... | 1100 | 3840 | 214 | 6.6 | 23.0 | 1.7 | 766 | 8.0 | 93 | 1000 | 120 | 72 |

K Results based on colony count outside the acceptable range (non-ideal colony count).

## 01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

### WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | HARDNESS NONCARBONATE (MG/L AS CACO3) | CALCIUM DISSOLVED (MG/L AS CA) | MAGNESIUM, DISSOLVED (MG/L AS MG) | SODIUM, DISSOLVED (MG/L AS NA) | POTASSIUM, DISSOLVED (MG/L AS K) | ALKALINITY LAB (MG/L AS CACO3) | SULFATE DISSOLVED (MG/L AS SO4) | CHLORIDE, DISSOLVED (MG/L AS CL) | FLUORIDE, DISSOLVED (MG/L AS F) | SILICA, DISSOLVED (MG/L AS SIO2) | SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 02... | 33 | 23 | 4.2 | 11 | 1.2 | 42 | 24 | 14 | .2 | 2.6 | 130 |
| NOV 04... | 24 | 20 | 3.4 | 6.7 | 1.5 | 40 | 20 | 10 | .1 | 4.9 | 94 |
| DEC 02... | 28 | 23 | 4.5 | 7.8 | 1.5 | 48 | 23 | 12 | .1 | 4.7 | 123 |
| FEB 25... | 22 | 17 | 3.1 | 5.1 | 1.3 | 33 | 14 | 8.8 | <.1 | 4.2 | 89 |
| MAR 11... | 30 | 23 | 4.1 | 7.5 | 1.0 | 44 | 19 | 12 | <.1 | 5.2 | 118 |
| APR 01... | 16 | 21 | 3.5 | 10 | .9 | 51 | 21 | 12 | .1 | 4.6 | 112 |
| 28... | 29 | 19 | 3.7 | 8.7 | .9 | 34 | 17 | 10 | <.1 | 4.8 | 104 |
| MAY 12... | 22 | 20 | 4.0 | 8.6 | .8 | 62 | 18 | 13 | <.1 | 3.6 | 106 |
| JUN 09... | 25 | 22 | 4.4 | 9.8 | 1.0 | 48 | 19 | 12 | <.1 | 3.2 | 111 |
| JUL 07... | 32 | 28 | 4.8 | 12 | 1.3 | 58 | 21 | 14 | <.1 | 1.9 | 135 |
| AUG 05... | 21 | 20 | 3.8 | 9.7 | 1.1 | 45 | 21 | 12 | <.1 | 2.8 | 113 |
| SEP 01... | 25 | 24 | 2.9 | 12 | .8 | 47 | 22 | 18 | <.1 | 3.3 | 120 |

| DATE | SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) | NITROGEN, NO2+NO3 TOTAL (MG/L AS N) | NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) | NITROGEN, AMMONIA TOTAL (MG/L AS N) | NITROGEN, AMMONIA DISSOLVED (MG/L AS N) | NITROGEN, ORGANIC TOTAL (MG/L AS N) | NITROGEN, ORGANIC DISSOLVED (MG/L AS N) | NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) | NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) | NITROGEN, TOTAL (MG/L AS N) | NITROGEN DISSOLVED (MG/L AS N) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 02... | 108 | .67 | .66 | .070 | .100 | .29 | .25 | .36 | .35 | 1.0 | 1.0 |
| NOV 04... | 93 | .59 | .57 | .170 | .080 | .36 | .14 | .53 | .22 | 1.1 | .79 |
| DEC 02... | 108 | .64 | .59 | .090 | .080 | .27 | .21 | .36 | .29 | 1.0 | .88 |
| FEB 25... | 77 | .84 | .85 | .120 | .080 | .61 | .19 | .73 | .27 | 1.6 | 1.1 |
| MAR 11... | 104 | 1.2 | 1.2 | .150 | .210 | .38 | .04 | .53 | .25 | 1.7 | 1.5 |
| APR 01... | 107 | .69 | .67 | .220 | .210 | .98 | .36 | 1.20 | .57 | 1.9 | 1.2 |
| 28... | 87 | .63 | .61 | .190 | .190 | .44 | .30 | .63 | .49 | 1.3 | 1.1 |
| MAY 12... | 95 | .72 | .01 | .130 | .010 | .70 | .74 | .83 | .75 | 1.6 | .76 |
| JUN 09... | 104 | .63 | .73 | .100 | .110 | .56 | .37 | .66 | .48 | 1.3 | 1.2 |
| JUL 07... | 121 | .79 | .77 | .050 | .040 | .53 | .28 | .58 | .32 | 1.4 | 1.1 |
| AUG 05... | 100 | .63 | .51 | .040 | .060 | .45 | .45 | .49 | .51 | 1.1 | 1.0 |
| SEP 01... | 115 | .85 | .83 | .130 | .140 | .48 | .33 | .61 | .47 | 1.5 | 1.3 |

| DATE | PHOSPHORUS, TOTAL (MG/L AS P) | PHOSPHORUS, DISSOLVED (MG/L AS P) | ARSENIC TOTAL (UG/L AS AS) | ARSENIC DISSOLVED (UG/L AS AS) | BARIUM, TOTAL RECOVERABLE (UG/L AS BA) | BARIUM, DISSOLVED (UG/L AS BA) | CADMIUM TOTAL RECOVERABLE (UG/L AS CD) | CADMIUM DISSOLVED (UG/L AS CD) | CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) | CHROMIUM, DISSOLVED (UG/L AS CR) | COBALT, TOTAL RECOVERABLE (UG/L AS CO) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 02... | .040 | .020 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV 04... | .050 | .030 | 1 | 3 | 100 | 30 | 0 | 2 | 20 | <10 | 0 |
| DEC 02... | .040 | .020 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB 25... | .120 | .020 | 2 | 2 | 100 | 100 | 2 | 0 | 20 | 20 | 1 |
| MAR 11... | .030 | <.010 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| APR 01... | .030 | .010 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 28... | .040 | <.010 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAY 12... | .050 | <.010 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUN 09... | .060 | .010 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUL 07... | .050 | .010 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG 05... | .040 | .020 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP 01... | .040 | .030 | 2 | 1 | 100 | 100 | <1 | 3 | 10 | <10 | <1 |

## HUDSON RIVER BASIN

## 01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

### WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | COBALT, DIS-SOLVED (UG/L AS CO) | COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) | COPPER, DIS-SOLVED (UG/L AS CU) | IRON, TOTAL RECOV-ERABLE (UG/L AS FE) | IRON, DIS-SOLVED (UG/L AS FE) | LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) | LEAD, DIS-SOLVED (UG/L AS PB) | MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) | MERCURY DIS-SOLVED (UG/L AS HG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 02... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV 04... | 1 | 19 | 5 | 530 | 70 | 23 | 3 | 30 | 20 | .1 | .1 |
| DEC 02... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB 25... | 0 | 16 | 4 | 3300 | 60 | 43 | 0 | 150 | 10 | <.1 | <.1 |
| MAR 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| APR 01... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 28... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAY 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUN 09... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUL 07... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG 05... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP 01... | <1 | 8 | 7 | 260 | 40 | 3 | 2 | 30 | 20 | <.1 | <.1 |

| DATE | NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) | NICKEL, DIS-SOLVED (UG/L AS NI) | SELE-NIUM, TOTAL (UG/L AS SE) | SELE-NIUM, DIS-SOLVED (UG/L AS SE) | SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) | SILVER, DIS-SOLVED (UG/L AS AG) | ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) | ZINC, DIS-SOLVED (UG/L AS ZN) | CARBON, ORGANIC TOTAL (MG/L AS C) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) | CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 02... | -- | -- | -- | -- | -- | -- | -- | -- | 5.9 | -- | -- |
| NOV 04... | 4 | 2 | 0 | 0 | -- | 0 | 40 | 20 | -- | 7.7 | .2 |
| DEC 02... | -- | -- | -- | -- | -- | -- | -- | -- | 4.6 | -- | -- |
| FEB 25... | 5 | 3 | 0 | 0 | 0 | 0 | 120 | 10 | -- | 3.6 | 1.6 |
| MAR 11... | -- | -- | -- | -- | -- | -- | -- | -- | 5.1 | -- | -- |
| APR 01... | -- | -- | -- | -- | -- | -- | -- | -- | 4.1 | -- | -- |
| 28... | -- | -- | -- | -- | -- | -- | -- | -- | 3.9 | -- | -- |
| MAY 12... | -- | -- | -- | -- | -- | -- | -- | -- | 44 | -- | -- |
| JUN 09... | -- | -- | -- | -- | -- | -- | -- | -- | 6.2 | -- | -- |
| JUL 07... | -- | -- | -- | -- | -- | -- | -- | -- | 4.7 | -- | -- |
| AUG 05... | -- | -- | -- | -- | -- | -- | -- | -- | 5.9 | -- | -- |
| SEP 01... | 7 | 3 | <1 | <1 | <1 | <1 | 30 | 10 | -- | 5.0 | .5 |

### RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT) | GROSS ALPHA, DIS-SOLVED (PCI/L AS U-NAT) | GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) | GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT) | GROSS BETA, DIS-SOLVED (PCI/L AS CS-137) | GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90) | GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) | GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) | RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L) | URANIUM NATURAL DIS-SOLVED (UG/L AS U) | URANIUM DIS-SOLVED, EXTRAC-TION (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MAR 11... | 5.1 | 3.5 | <.4 | .3 | 3.5 | 3.4 | <.5 | <.5 | <.26 | 1.2 | -- |
| MAY 12... | <2.2 | 1.5 | <.4 | .3 | 2.8 | 2.7 | .8 | .8 | .06 | .9 | -- |
| AUG 05... | <2.8 | -- | <.4 | -- | 2.5 | 2.4 | .4 | .4 | .06 | -- | .32 |

## 01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

### WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | TIME | SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) | DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET) | SPE- CIFIC CON- DUCT- ANCE (UMHOS) |
|---|---|---|---|---|
| OCT | | | | |
| 02... | 1105 | 429 | 24.0 | 206 |
| 02... | 1108 | 637 | 6.00 | 221 |
| 02... | 1110 | 574 | 14.0 | 210 |
| 02... | 1115 | 367 | 23.0 | 208 |
| 02... | 1125 | 304 | 27.0 | 208 |
| 02... | 1135 | 241 | 25.0 | 204 |
| 02... | 1145 | 159 | 25.0 | 201 |
| 02... | 1200 | 97 | 23.0 | 204 |
| 02... | 1215 | 35 | 25.0 | 205 |
| NOV | | | | |
| 04... | 1225 | 429 | 24.0 | 177 |
| 04... | 1230 | 637 | 8.50 | 174 |
| 04... | 1235 | 574 | 14.0 | 174 |
| 04... | 1245 | 480 | 23.0 | 156 |
| 04... | 1255 | 367 | 27.0 | 155 |
| 04... | 1310 | 304 | 27.0 | 152 |
| 04... | 1320 | 241 | 26.0 | 149 |
| 04... | 1330 | 159 | 24.0 | 148 |
| 04... | 1345 | 97 | 23.0 | 147 |
| 04... | 1350 | 35 | 24.0 | 146 |
| DEC | | | | |
| 02... | 1230 | 429 | 25.0 | 234 |
| 02... | 1255 | 637 | 7.00 | 253 |
| 02... | 1301 | 574 | 14.0 | 242 |
| 02... | 1305 | 480 | 24.0 | 230 |
| 02... | 1330 | 367 | 28.0 | 216 |
| 02... | 1345 | 304 | 27.0 | 209 |
| 02... | 1400 | 241 | 25.0 | 205 |
| 02... | 1405 | 159 | 25.0 | 195 |
| 02... | 1415 | 97 | 23.0 | 185 |
| 02... | 1430 | 35 | 24.0 | 178 |
| FEB | | | | |
| 25... | 1100 | 637 | 10.5 | 160 |
| 25... | 1110 | 574 | 17.5 | 149 |
| 25... | 1125 | 480 | 25.0 | 148 |
| 25... | 1134 | 429 | 28.5 | 146 |
| 25... | 1140 | 367 | 32.0 | 138 |
| 25... | 1150 | 304 | 31.0 | 126 |
| 25... | 1210 | 241 | 29.0 | 114 |
| 25... | 1225 | 159 | 29.0 | 113 |
| 25... | 1245 | 97 | 27.0 | 100 |
| 25... | 1315 | 35 | 27.0 | 121 |
| MAR | | | | |
| 11... | 1140 | 637 | 10.5 | 238 |
| 11... | 1200 | 574 | 11.5 | 219 |
| 11... | 1220 | 480 | 21.0 | 236 |
| 11... | 1230 | 429 | 21.5 | 246 |
| 11... | 1240 | 367 | 24.5 | 214 |
| 11... | 1250 | 304 | 24.0 | 203 |
| 11... | 1305 | 241 | 22.5 | 179 |
| 11... | 1315 | 159 | 21.0 | 152 |
| 11... | 1325 | 97 | 20.5 | 173 |
| 11... | 1330 | 35 | 9.50 | 176 |
| APR | | | | |
| 01... | 1030 | 429 | 26.5 | 218 |
| 01... | 1100 | 637 | 9.50 | 234 |
| 01... | 1125 | 574 | 16.5 | 225 |
| 01... | 1140 | 480 | 25.5 | 213 |
| 01... | 1205 | 367 | 28.5 | 185 |
| 01... | 1225 | 304 | 28.5 | 194 |
| 01... | 1245 | 241 | 27.0 | 170 |
| 01... | 1300 | 159 | 25.5 | 153 |
| 01... | 1315 | 97 | 24.5 | 146 |
| 01... | 1330 | 35 | 24.0 | 148 |
| APR | | | | |
| 28... | 1000 | 429 | 24.0 | 178 |
| 28... | 1010 | 637 | 7.00 | 179 |
| 28... | 1020 | 574 | 14.0 | 180 |
| 28... | 1030 | 480 | 24.0 | 173 |
| 28... | 1045 | 367 | 27.0 | 165 |
| 28... | 1055 | 304 | 28.0 | 161 |
| 28... | 1115 | 241 | 26.0 | 154 |
| 28... | 1130 | 159 | 24.0 | 148 |
| 28... | 1140 | 97 | 23.0 | 145 |
| 28... | 1150 | 35 | 23.0 | 140 |
| MAY | | | | |
| 12... | 0854 | 429 | 23.0 | 182 |
| 12... | 0930 | 480 | 23.5 | 185 |
| 12... | 0945 | 574 | 14.0 | 186 |
| 12... | 0950 | 637 | 7.00 | 185 |
| 12... | 1002 | 367 | 27.0 | 178 |
| 12... | 1015 | 304 | 27.0 | 175 |
| 12... | 1030 | 241 | 26.0 | 175 |
| 12... | 1045 | 159 | 25.0 | 178 |
| 12... | 1101 | 97 | 24.0 | 175 |
| 12... | 1115 | 35 | 23.5 | 175 |
| JUN | | | | |
| 09... | 1302 | 367 | 26.5 | 201 |
| 09... | 1312 | 429 | 23.5 | 197 |
| 09... | 1317 | 480 | 23.0 | 196 |
| 09... | 1322 | 574 | 12.0 | 200 |
| 09... | 1325 | 637 | 6.00 | 203 |
| 09... | 1334 | 304 | 25.5 | 194 |
| 09... | 1349 | 241 | 25.5 | 194 |
| 09... | 1354 | 159 | 22.5 | 191 |
| 09... | 1403 | 97 | 21.0 | 190 |
| 09... | 1408 | 35 | 21.5 | 190 |
| JUL | | | | |
| 07... | 1030 | 429 | 24.5 | 242 |
| 07... | 1035 | 480 | 24.5 | 237 |
| 07... | 1040 | 574 | 14.0 | 235 |
| 07... | 1045 | 637 | 7.00 | 236 |
| 07... | 1050 | 367 | 27.5 | 236 |
| 07... | 1055 | 304 | 26.5 | 237 |
| 07... | 1101 | 241 | 24.5 | 235 |
| 07... | 1105 | 159 | 24.0 | 235 |
| 07... | 1110 | 97 | 22.5 | 234 |
| 07... | 1115 | 35 | 19.5 | 234 |
| AUG | | | | |
| 05... | 1000 | 429 | 24.5 | 198 |
| 05... | 1015 | 637 | 6.50 | 195 |
| 05... | 1020 | 574 | 13.5 | 195 |
| 05... | 1035 | 480 | 23.0 | 194 |
| 05... | 1055 | 367 | 26.5 | 192 |
| 05... | 1105 | 304 | 25.5 | 178 |
| 05... | 1115 | 241 | 24.0 | 175 |
| 05... | 1130 | 159 | 23.0 | 164 |
| 05... | 1145 | 97 | 21.0 | 160 |
| 05... | 1155 | 35 | 21.0 | 165 |
| SEP | | | | |
| 01... | 1000 | 367 | 24.8 | 228 |
| 01... | 1010 | 637 | 4.50 | 212 |
| 01... | 1025 | 574 | 11.2 | 210 |
| 01... | 1040 | 480 | 20.6 | 206 |
| 01... | 1055 | 429 | 21.6 | 205 |
| 01... | 1110 | 304 | 23.6 | 205 |
| 01... | 1120 | 241 | 22.2 | 201 |
| 01... | 1130 | 159 | 20.6 | 200 |
| 01... | 1145 | 97 | 19.4 | 203 |
| 01... | 1200 | 35 | 19.6 | 205 |

## 01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

## QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

### PHYTOPLANKTON

| | NOV 4,80 | MAR 11,81 | MAY 12,81 | JUN 9,81 |
|---|---|---|---|---|
| DATE | NOV 4,80 | MAR 11,81 | MAY 12,81 | JUN 9,81 |
| TIME | 1300 | 1300 | 1100 | 1100 |
| TOTAL CELLS/ML | 1200 | 790 | 11000 | 43000 |
| DIVERSITY: DIVISION | 1.5 | 1.8 | 1.6 | 1.1 |
| .CLASS | 1.5 | 2.0 | 1.6 | 1.1 |
| ..ORDER | 1.8 | 2.8 | 1.9 | 1.1 |
| ...FAMILY | 2.2 | 3.3 | 2.3 | 1.2 |
| ....GENUS | 2.9 | 3.5 | 2.7 | 1.5 |

| ORGANISM | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT |
|---|---|---|---|---|---|---|---|---|
| CHLOROPHYTA (GREEN ALGAE) | | | | | | | | |
| .CHLOROPHYCEAE | | | | | | | | |
| ..CHLOROCOCCALES | | | | | | | | |
| ...CHARACIACEAE | | | | | | | | |
| ....SCHROEDERIA | -- | - | 14 | 2 | -- | - | -- | - |
| ...MICRACTINIACEAE | | | | | | | | |
| ....MICRACTINIUM | 39 | 3 | 56 | 7 | 910 | 9 | -- | - |
| ...OOCYSTACEAE | | | | | | | | |
| ....ANKISTRODESMUS | 26 | 2 | 28 | 4 | * | 0 | 290 | 1 |
| ....DICTYOSPHAERIUM | 52 | 4 | 56 | 7 | 1400 | 13 | -- | - |
| ....KIRCHNERIELLA | -- | - | -- | - | -- | - | -- | - |
| ....OOCYSTIS | 52 | 4 | -- | - | -- | - | -- | - |
| ....SELENASTRUM | 26 | 2 | -- | - | -- | - | -- | - |
| ...SCENEDESMACEAE | | | | | | | | |
| ....SCENEDESMUS | 52 | 4 | -- | - | -- | - | 3400 | 8 |
| ....TETRASTRUM | -- | - | -- | - | 130 | 1 | -- | - |
| ..ULOTRICHALES | | | | | | | | |
| ...ULOTRICHACEAE | | | | | | | | |
| ..VOLVOCALES | | | | | | | | |
| ...CHLAMYDOMONADACEAE | | | | | | | | |
| ....CHLAMYDOMONAS | 13 | 1 | 56 | 7 | * | 0 | -- | - |
| ....CHLOROGONIUM | -- | - | 71 | 9 | -- | - | -- | - |
| ...VOLVOCACEAE | | | | | | | | |
| CHRYSOPHYTA | | | | | | | | |
| .BACILLARIOPHYCEAE | | | | | | | | |
| ..CENTRALES | | | | | | | | |
| ...COSCINODISCACEAE | | | | | | | | |
| ....CYCLOTELLA | 260# | 21 | 160# | 20 | 640 | 6 | 30000# | 69 |
| ....MELOSIRA | 270# | 22 | -- | - | 370 | 3 | 2600 | 6 |
| ....STEPHANODISCUS | -- | - | -- | - | 2100# | 20 | -- | - |
| ..PENNALES | | | | | | | | |
| ...ACHNANTHACEAE | | | | | | | | |
| ....ACHNANTHES | -- | - | 56 | 7 | -- | - | -- | - |
| ...CYMBELLACEAE | | | | | | | | |
| ....CYMBELLA | -- | - | -- | - | * | 0 | -- | - |
| ...DIATOMACEAE | | | | | | | | |
| ....DIATOMA | -- | - | -- | - | 240 | 2 | -- | - |
| ...FRAGILARIACEAE | | | | | | | | |
| ....ASTERIONELLA | -- | - | 42 | 5 | 200 | 2 | -- | - |
| ....SYNEDRA | 13 | 1 | -- | - | 170 | 2 | -- | - |
| ...NAVICULACEAE | | | | | | | | |
| ....NAVICULA | 26 | 2 | -- | - | 67 | 1 | -- | - |
| ...NITZSCHIACEAE | | | | | | | | |
| ....NITZSCHIA | 52 | 4 | 14 | 2 | 170 | 2 | -- | - |
| .CHRYSOPHYCEAE | | | | | | | | |
| ..CHRYSOMONADALES | | | | | | | | |
| ...CHROMULINACEAE | | | | | | | | |
| ....CHRYSOCOCCUS | -- | - | 42 | 5 | -- | - | -- | - |
| ...MALLOMONADACEAE | | | | | | | | |
| ....MALLOMONAS | -- | - | -- | - | -- | - | -- | - |
| CRYPTOPHYTA (CRYPTOMONADS) | | | | | | | | |
| .CRYPTOPHYCEAE | | | | | | | | |
| ..CRYPTOMONADALES | | | | | | | | |
| ...CRYPTOCHRYSIDACEAE | | | | | | | | |
| ....CHROOMONAS | -- | - | 99 | 13 | -- | - | 1100 | 3 |
| CYANOPHYTA (BLUE-GREEN ALGAE) | | | | | | | | |
| .CYANOPHYCEAE | | | | | | | | |
| ..CHROOCOCCALES | | | | | | | | |
| ...CHROOCOCCACEAE | | | | | | | | |
| ....ANACYSTIS | 360# | 29 | -- | - | 4100# | 39 | 5700 | 13 |
| ....COCCOCHLORIS | -- | - | 14 | 2 | -- | - | -- | - |
| ..HORMOGONALES | | | | | | | | |
| ...OSCILLATORIACEAE | | | | | | | | |
| ....PHORMIDIUM | -- | - | 85 | 11 | -- | - | -- | - |

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

## 01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

## QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

### PHYTOPLANKTON

| DATE | JUL 7,81 | AUG 5,81 | SEP 1,81 |
|---|---|---|---|
| TIME | 1100 | 1030 | 1100 |
| TOTAL CELLS/ML | 8600 | 4300 | 980 |
| DIVERSITY: DIVISION | 1.3 | 1.7 | 1.5 |
| .CLASS | 1.3 | 1.7 | 1.5 |
| ..ORDER | 1.6 | 2.3 | 1.8 |
| ...FAMILY | 1.7 | 2.4 | 1.8 |
| ....GENUS | 2.6 | 2.9 | 2.0 |

| ORGANISM | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT |
|---|---|---|---|---|---|---|
| CHLOROPHYTA (GREEN ALGAE) | | | | | | |
| .CHLOROPHYCEAE | | | | | | |
| ..CHLOROCOCCALES | | | | | | |
| ...CHARACIACEAE | | | | | | |
| ...MICRACTINIACEAE | | | | | | |
| ....MICRACTINIUM | 100 | 1 | -- | - | -- | - |
| ...OOCYSTACEAE | | | | | | |
| ....ANKISTRODESMUS | -- | - | 68 | 2 | -- | - |
| ....DICTYOSPHAERIUM | -- | - | -- | - | -- | - |
| ....KIRCHNERIELLA | -- | - | 290 | 7 | -- | - |
| ....OOCYSTIS | -- | - | * | 0 | -- | - |
| ....TETRAEDRON | -- | - | * | 0 | -- | - |
| ...SCENEDESMACEAE | | | | | | |
| ....CRUCIGENIA | -- | - | 140 | 3 | -- | - |
| ....SCENEDESMUS | 500 | 6 | 140 | 3 | 260# | 26 |
| ..ULOTRICHALES | | | | | | |
| ...ULOTRICHACEAE | | | | | | |
| ....ULOTHRIX | -- | - | 1100# | 24 | -- | - |
| ..VOLVOCALES | | | | | | |
| ...CHLAMYDOMONADACEAE | | | | | | |
| ....CHLAMYDOMONAS | 50 | 1 | 68 | 2 | 72 | 7 |
| ...VOLVOCACEAE | | | | | | |
| ....PANDORINA | 810 | 9 | -- | - | -- | - |
| CHRYSOPHYTA | | | | | | |
| .BACILLARIOPHYCEAE | | | | | | |
| ..CENTRALES | | | | | | |
| ...COSCINODISCACEAE | | | | | | |
| ....CYCLOTELLA | 3100# | 36 | 780# | 18 | 460# | 47 |
| ....MELOSIRA | 1600# | 18 | 170 | 4 | 43 | 4 |
| ....STEPHANODISCUS | 960 | 11 | 68 | 2 | -- | - |
| ..PENNALES | | | | | | |
| ...ACHNANTHACEAE | | | | | | |
| ....COCCONEIS | -- | - | 34 | 1 | -- | - |
| ...CYMBELLACEAE | | | | | | |
| ...DIATOMACEAE | | | | | | |
| ...FRAGILARIACEAE | | | | | | |
| ...NAVICULACEAE | | | | | | |
| ....NAVICULA | -- | - | 34 | 1 | -- | - |
| ...NITZSCHIACEAE | | | | | | |
| ....NITZSCHIA | 200 | 2 | * | 0 | 14 | 1 |
| .CHRYSOPHYCEAE | | | | | | |
| ..CHRYSOMONADALES | | | | | | |
| ...CHROMULINACEAE | | | | | | |
| ...MALLOMONADACEAE | | | | | | |
| ....MALLOMONAS | -- | - | * | 0 | -- | - |
| CRYPTOPHYTA (CRYPTOMONADS) | | | | | | |
| .CRYPTOPHYCEAE | | | | | | |
| ..CRYPTOMONADALES | | | | | | |
| ...CRYPTOCHRYSIDACEAE | | | | | | |
| ....CHROOMONAS | -- | - | 68 | 2 | -- | - |
| CYANOPHYTA (BLUE-GREEN ALGAE) | | | | | | |
| .CYANOPHYCEAE | | | | | | |
| ..CHROOCOCCALES | | | | | | |
| ...CHROOCOCCACEAE | | | | | | |
| ....AGMENELLUM | -- | - | 1300# | 30 | -- | - |
| ....GOMPHOSPHAERIA | -- | - | 68 | 2 | -- | - |
| ..HORMOGONALES | | | | | | |
| ...OSCILLATORIACEAE | | | | | | |
| ....OSCILLATORIA | 1300# | 15 | -- | - | -- | - |
| EUGLENOPHYTA (EUGLENOIDS) | | | | | | |
| .EUGLENOPHYCEAE | | | | | | |
| ..EUGLENALES | | | | | | |
| ...EUGLENACEAE | | | | | | |
| ....TRACHELOMONAS | -- | - | -- | - | 120 | 12 |
| PYRRHOPHYTA (FIRE ALGAE) | | | | | | |
| .DINOPHYCEAE | | | | | | |
| ..PERIDINIALES | | | | | | |
| ...GLENODINIACEAE | | | | | | |
| ....GLENODINIUM | 50 | 1 | -- | - | -- | - |
| ...PERIDINIACEAE | | | | | | |
| ....PERIDINIUM | -- | - | -- | - | 14 | 1 |

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

## 01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

### SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | TIME | DIS-CHARGE, IN CUBIC FEET PER SECOND | SEDI-MENT, SUS-PENDED (MG/L) | SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) | SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM | DATE | TIME | DIS-CHARGE, IN CUBIC FEET PER SECOND | SEDI-MENT, SUS-PENDED (MG/L) | SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) | SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT<br>02... | 1100 | 4390 | 14 | 166 | -- | MAY<br>12... | 1100 | 9920 | 8 | 214 | -- |
| NOV<br>04... | 1300 | 6640 | 8 | 143 | -- | JUN<br>09... | 1100 | 6070 | 9 | 148 | -- |
| DEC<br>02... | 1300 | 12900 | 10 | 348 | -- | JUL<br>07... | 1100 | 7970 | 5 | 108 | -- |
| FEB<br>25... | 1300 | 71100 | 104 | 20000 | 94 | AUG<br>05... | 1030 | 5090 | 3 | 41 | -- |
| MAR<br>11... | 1300 | 11800 | 5 | 159 | -- | SEP<br>01... | 1100 | 3840 | 3 | 31 | -- |
| APR<br>01... | 1200 | 17800 | 14 | 673 | -- | | | | | | |
| 28... | 1100 | 11200 | 8 | 242 | -- | | | | | | |

### TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
ONCE-DAILY

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 17.0 | 8.0 | 3.0 | | | | 8.0 | 11.0 | 22.0 | 24.0 | 24.0 | 23.0 |
| 2 | 17.0 | 8.0 | 3.0 | | | | 8.0 | 13.0 | 21.0 | 24.0 | 24.0 | 23.0 |
| 3 | 17.0 | 7.0 | 3.0 | | | | 8.0 | 13.0 | 21.0 | 24.0 | 24.0 | 23.0 |
| 4 | 17.0 | 7.0 | 1.0 | | | | --- | 13.0 | 22.0 | 24.0 | 24.0 | 23.0 |
| 5 | 16.0 | 7.0 | 2.0 | | | | --- | 15.0 | 22.0 | 25.0 | 24.0 | 23.0 |
| 6 | 16.0 | 7.0 | 1.0 | | | | --- | 15.0 | 22.0 | 25.0 | 24.0 | 23.0 |
| 7 | 16.0 | 7.0 | 1.0 | | | | --- | 15.0 | 23.0 | 25.0 | 25.0 | 23.0 |
| 8 | 15.0 | 7.0 | 1.0 | | | | --- | 15.0 | 23.0 | 25.0 | 25.0 | 23.0 |
| 9 | 15.0 | 7.0 | 1.0 | | | | --- | 13.0 | 23.0 | 26.0 | 24.0 | 23.0 |
| 10 | 15,0 | 6.0 | 1.0 | | | | --- | 15.0 | 23.0 | 26.0 | 24.0 | 23.0 |
| 11 | 14.0 | 6.0 | 1.0 | | | | --- | 15.0 | 23.0 | 27.0 | 25.0 | 23.0 |
| 12 | 14.0 | 6.0 | 1.0 | | | | --- | 13.0 | 23.0 | 27.0 | 26.0 | 23.0 |
| 13 | 14.0 | 4.0 | 1.0 | | | | --- | 13.0 | 23.0 | 27.0 | 26.0 | 22.0 |
| 14 | 14.0 | 4.0 | 1.0 | | | | --- | 13.0 | 24.0 | 27.0 | 26.0 | 22.0 |
| 15 | 14.0 | 4.0 | 1.0 | | | | --- | 13.0 | 23.0 | 26.0 | 26.0 | 22.0 |
| 16 | 12.0 | 4.0 | 1.0 | | | | 14.0 | 13.0 | 23.0 | 26.0 | 26.0 | 22.0 |
| 17 | 12.0 | 4.0 | 1.0 | | | | 14.0 | 13.0 | 24.0 | 26.0 | 26.0 | 22.0 |
| 18 | 12.0 | 4.0 | --- | | | | 10.0 | 13.0 | 24.0 | 28.0 | 26.0 | 22.0 |
| 19 | 12.0 | 4.0 | --- | | | | 10.0 | 13.0 | 24.0 | 28.0 | 26.0 | 22.0 |
| 20 | 12.0 | 4.0 | --- | | | | 10.0 | 14.0 | 24.0 | 28.0 | 26.0 | 19.0 |
| 21 | 12.0 | 4.0 | --- | | | | 10.0 | 15.0 | 24.0 | 28.0 | 26.0 | 19.0 |
| 22 | 12.0 | 4.0 | --- | | | | 10.0 | 16.0 | 24.0 | 28.0 | 25.0 | 19.0 |
| 23 | 12.0 | 4.0 | --- | | | | 10.0 | 16.0 | 24.0 | 28.0 | 25.0 | 18.0 |
| 24 | 12.0 | 4.0 | --- | | | | 10.0 | 17.0 | 24.0 | 28.0 | 25.0 | --- |
| 25 | 11.0 | 4.0 | --- | | | | 10.0 | 18,0 | 24.0 | 28.0 | 25.0 | --- |
| 26 | 10.0 | 4.0 | --- | | | | 10.0 | 18.0 | 26.0 | 28.0 | 25.0 | 15.0 |
| 27 | 10.0 | 4.0 | --- | | | | 10.0 | 19.0 | 26.0 | 28.0 | 25.0 | 15.0 |
| 28 | 10.0 | 4.0 | --- | | | | 10.0 | 19.0 | 26.0 | 28,0 | 25.0 | 15.0 |
| 29 | 10.0 | 4.0 | --- | | | | 10.0 | 21.0 | 26,0 | 28.0 | 24.0 | 15.0 |
| 30 | 8.0 | 4.0 | --- | | | | 10.0 | 21.0 | 24.0 | 28.0 | 24.0 | 15.0 |
| 31 | 8.0 | --- | --- | | | | --- | 22.0 | --- | 29.0 | 23.0 | --- |
| MEAN | 13.0 | 5.0 | 1.5 | | | | 10.0 | 15.5 | 23.5 | 26,5 | 25.0 | 20.5 |

## 01359528 NORMANS KILL AT ALBANY, NY

LOCATION.--Lat 42°38'00", long 73°48'22", Albany County, Hydrologic Unit 02020006, on left bank, 0.35 mi (0.56 km) upstream from bridge on Normans Kill Road at Normansville, and 0.40 mi (0.64 km) upstream from Delaware Avenue bridge in Albany.

DRAINAGE AREA.--168 mi$^2$ (435 km$^2$).

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1949, 1954, 1959, 1962-65. May 1979 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 90 ft (27.4 m), from topographic map.

REMARKS.--Records good except those for winter periods, which are poor. Diversion above station for municipal supply by city of Watervliet and town of Guilderland. Seasonal diversions for two golf courses.

COOPERATION.--Figures of diversions from Watervliet Reservoir for municipal supply furnished by city of Watervliet and town of Guilderland.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 11,600 ft$^3$/s (329 m$^3$/s) Mar. 22, 1980, gage height 13.41 ft (4.087 m); minimum 11 ft$^3$/s (0.31 m$^3$/s) Sept. 29, Oct. 9, 1980, Sept. 30, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,200 ft$^3$/s (62.3 m$^3$/s) and maximum (*):

| Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) | Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 12 | 0515 | Unknown | | *a9.99 | 3.045 | Feb. 21 | 1015 | *4,300 | 122 | 8.81 | 2.685 |

a Ice jam.

Minimum discharge, 11 ft$^3$/s (0.31 m$^3$/s) Oct. 9, Sept. 30; minimum gage height 2.98 ft (0.908 m) Oct. 9, Aug. 17, 18, 20-21, Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13 | 23 | 163 | 60 | 46 | 311 | 78 | 78 | 41 | 31 | 28 | 21 |
| 2 | 15 | 23 | 152 | 58 | 730 | 257 | 169 | 68 | 36 | 33 | 28 | 21 |
| 3 | 18 | 21 | 186 | 56 | 740 | 205 | 183 | 60 | 36 | 68 | 35 | 26 |
| 4 | 31 | 21 | 130 | 54 | 620 | 157 | 135 | 53 | 38 | 110 | 63 | 25 |
| 5 | 21 | 23 | 80 | 52 | 560 | 135 | 125 | 49 | 36 | 118 | 48 | 23 |
| 6 | 16 | 21 | 70 | 50 | 470 | 120 | 130 | 48 | 48 | 129 | 37 | 21 |
| 7 | 15 | 23 | 64 | 48 | 430 | 109 | 114 | 49 | 39 | 122 | 33 | 20 |
| 8 | 16 | 24 | 72 | 47 | 400 | 105 | 90 | 44 | 33 | 104 | 35 | 36 |
| 9 | 15 | 25 | 82 | 45 | 370 | 105 | 82 | 39 | 41 | 89 | 34 | 78 |
| 10 | 15 | 34 | 112 | 44 | 350 | 105 | 88 | 39 | 38 | 78 | 33 | 29 |
| 11 | 17 | 25 | 100 | 43 | 800 | 107 | 80 | 41 | 39 | 66 | 39 | 24 |
| 12 | 18 | 25 | 80 | 42 | 1800 | 107 | 80 | 166 | 36 | 57 | 28 | 22 |
| 13 | 17 | 25 | 68 | 42 | 759 | 100 | 72 | 522 | 41 | 53 | 19 | 22 |
| 14 | 17 | 27 | 70 | 41 | 482 | 100 | 70 | 291 | 41 | 48 | 18 | 34 |
| 15 | 17 | 27 | 68 | 40 | 336 | 86 | 78 | 186 | 53 | 42 | 19 | 28 |
| 16 | 18 | 27 | 64 | 39 | 240 | 86 | 66 | 214 | 74 | 34 | 25 | 24 |
| 17 | 18 | 25 | 60 | 39 | 243 | 82 | 62 | 175 | 93 | 31 | 19 | 21 |
| 18 | 23 | 24 | 58 | 38 | 507 | 72 | 62 | 117 | 74 | 33 | 17 | 21 |
| 19 | 25 | 34 | 60 | 41 | 753 | 60 | 62 | 88 | 64 | 33 | 17 | 23 |
| 20 | 21 | 31 | 64 | 43 | 1360 | 57 | 51 | 72 | 51 | 52 | 16 | 22 |
| 21 | 21 | 28 | 64 | 41 | 3160 | 55 | 53 | 60 | 60 | 67 | 16 | 20 |
| 22 | 23 | 30 | 62 | 42 | 1310 | 53 | 46 | 53 | 53 | 67 | 16 | 23 |
| 23 | 21 | 31 | 60 | 45 | 777 | 53 | 48 | 46 | 46 | 35 | 17 | 35 |
| 24 | 21 | 53 | 60 | 48 | 1310 | 55 | 95 | 43 | 36 | 33 | 21 | 41 |
| 25 | 44 | 97 | 58 | 49 | 1040 | 58 | 120 | 39 | 61 | 31 | 20 | 30 |
| 26 | 84 | 84 | 56 | 48 | 820 | 57 | 93 | 38 | 50 | 32 | 18 | 21 |
| 27 | 17 | 175 | 54 | 47 | 568 | 62 | 74 | 36 | 37 | 37 | 17 | 20 |
| 28 | 17 | 149 | 58 | 46 | 379 | 66 | 66 | 36 | 34 | 31 | 17 | 23 |
| 29 | 23 | 247 | 60 | 44 | --- | 66 | 70 | 41 | 33 | 35 | 19 | 18 |
| 30 | 21 | 227 | 62 | 42 | --- | 68 | 88 | 46 | 31 | 32 | 24 | 15 |
| 31 | 21 | --- | 64 | 40 | --- | 70 | --- | 62 | --- | 30 | 21 | --- |
| TOTAL | 679 | 1629 | 2461 | 1414 | 21360 | 3129 | 2630 | 2899 | 1393 | 1761 | 797 | 787 |
| MEAN | 21.9 | 54.3 | 79.4 | 45.6 | 763 | 101 | 87.7 | 93.5 | 46.4 | 56.8 | 25.7 | 26.2 |
| MAX | 84 | 247 | 186 | 60 | 3160 | 311 | 183 | 522 | 93 | 129 | 63 | 78 |
| MIN | 13 | 21 | 54 | 38 | 46 | 53 | 46 | 36 | 31 | 30 | 16 | 15 |
| ‡ | 8.45 | 8.17 | 8.06 | 8.29 | 7.57 | 7.23 | 7.07 | 7.36 | 7.95 | 7.84 | 8.08 | 7.63 |

CAL YR 1980 TOTAL 47147 MEAN 129 MAX 8070 MIN 12 ‡ 8.37
WTR YR 1981 TOTAL 40939 MEAN 112 MAX 3160 MIN 13 ‡ 7.81

‡ Diversion, in cubic feet per second, from Watervliet Reservoir for municipal supply.

## 01359750 MOORDENER KILL AT CASTLETON-ON-HUDSON, NY

LOCATION.--Lat 42°32'02", long 73°44'15", Rensselaer County, Hydrologic Unit 02020006, on left bank 800 ft (244 m) downstream from bridge on State Highway 150, 0.2 mi (0.3 km) east of village of Castleton-on-Hudson, 0.5 mi (0.8 km) downstream from unnamed tributary, and 1.2 mi (1.9 km) upstream from mouth.

DRAINAGE AREA.--32.6 $mi^2$ (84.4 $km^2$).

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 98.72 ft (30.090 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 25, 1957, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for winter periods, which are poor. Slight diurnal fluctuation of low flow by mills upstream and occasional regulation at dam 800 ft (244 m) upstream.

AVERAGE DISCHARGE.--24 years, 37.6 $ft^3/s$ (1.065 $m^3/s$), 15.66 in/yr (398 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,350 $ft^3/s$ (38.2 $m^3/s$) Jan. 22, 1959, gage height, 3.63 ft (1.106 m); maximum gage height, 4.02 ft (1.225 m) Jan. 27, 1976 (ice jam); minimum discharge, 0.30 $ft^3/s$ (0.008 $m^3/s$) Aug. 9, 10, 1964, gage height, 0.25 ft (0.076 m); minimum daily, 1.0 $ft^3/s$ (0.028 $m^3/s$) Sept. 6, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 400 $ft^3/s$ (11 $m^3/s$):

| Date | Time | Discharge ($ft^3/s$) | Discharge ($m^3/s$) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|
| Feb. 12 | --- | Unknown | | Unknown | |

Minimum recorded discharge, 3.2 $ft^3/s$ (0.09 $m^3/s$) Aug. 21-24, gage height, 0.58 ft (0.177 m), but was estimated as less for several days during period of ice effect in January.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4.6 | 8.6 | 29 | 5.2 | 6.0 | 127 | 26 | 32 | 24 | 6.4 | 4.1 | 4.4 |
| 2 | 4.8 | 7.9 | 26 | 5.0 | 15 | 112 | 71 | 27 | 17 | 6.4 | 4.1 | 4.1 |
| 3 | 5.7 | 7.9 | 25 | 4.8 | 200 | 87 | 52 | 25 | 15 | 8.4 | 4.1 | 4.4 |
| 4 | 9.2 | 7.4 | 24 | 4.6 | 160 | 69 | 41 | 22 | 14 | 7.9 | 4.1 | 4.1 |
| 5 | 8.7 | 7.5 | 22 | 4.3 | 130 | 59 | 40 | 20 | 12 | 16 | 4.4 | 4.1 |
| 6 | 6.7 | 7.8 | 15 | 4.2 | 120 | 50 | 47 | 19 | 12 | 24 | 5.5 | 4.1 |
| 7 | 5.4 | 7.7 | 13 | 4.0 | 110 | 47 | 38 | 18 | 11 | 13 | 4.8 | 4.1 |
| 8 | 5.1 | 7.6 | 12 | 3.9 | 100 | 47 | 32 | 17 | 9.6 | 9.0 | 4.4 | 4.8 |
| 9 | 5.0 | 8.0 | 14 | 3.7 | 96 | 48 | 30 | 16 | 9.6 | 7.3 | 4.4 | 18 |
| 10 | 5.1 | 8.9 | 20 | 3.6 | 92 | 46 | 36 | 15 | 11 | 6.4 | 4.1 | 9.6 |
| 11 | 5.2 | 9.7 | 18 | 3.5 | 200 | 46 | 31 | 16 | 9.6 | 5.5 | 4.4 | 6.8 |
| 12 | 5.1 | 9.6 | 16 | 3.5 | 450 | 43 | 30 | 121 | 9.0 | 5.5 | 4.4 | 5.5 |
| 13 | 5.1 | 9.0 | 15 | 3.4 | 300 | 40 | 26 | 256 | 9.0 | 5.1 | 4.1 | 5.1 |
| 14 | 5.1 | 8.4 | 13 | 3.3 | 170 | 38 | 29 | 125 | 9.0 | 5.1 | 3.8 | 4.8 |
| 15 | 4.9 | 7.9 | 12 | 3.3 | 110 | 33 | 37 | 83 | 12 | 4.4 | 4.1 | 5.1 |
| 16 | 4.8 | 7.6 | 11 | 3.2 | 70 | 32 | 29 | 111 | 17 | 4.1 | 5.1 | 4.8 |
| 17 | 4.9 | 7.5 | 10 | 3.1 | 60 | 29 | 27 | 77 | 12 | 4.1 | 4.8 | 4.8 |
| 18 | 5.5 | 9.7 | 9.6 | 3.1 | 56 | 29 | 27 | 56 | 9.0 | 4.4 | 4.4 | 4.8 |
| 19 | 5.9 | 9.7 | 9.0 | 3.1 | 59 | 27 | 24 | 45 | 7.9 | 5.1 | 4.1 | 4.8 |
| 20 | 6.3 | 9.3 | 8.4 | 3.2 | 135 | 24 | 22 | 39 | 7.3 | 6.4 | 3.8 | 4.8 |
| 21 | 5.6 | 8.9 | 8.0 | 3.1 | 157 | 23 | 20 | 33 | 10 | 18 | 3.5 | 4.4 |
| 22 | 5.3 | 10 | 7.6 | 3.2 | 91 | 22 | 18 | 29 | 13 | 13 | 3.8 | 5.9 |
| 23 | 5.2 | 11 | 7.2 | 3.3 | 73 | 22 | 20 | 25 | 14 | 7.9 | 3.5 | 7.3 |
| 24 | 5.3 | 15 | 6.8 | 3.5 | 230 | 25 | 53 | 22 | 9.6 | 6.4 | 4.4 | 18 |
| 25 | 6.3 | 63 | 6.4 | 3.9 | 222 | 26 | 44 | 19 | 12 | 5.5 | 4.8 | 19 |
| 26 | 11 | 50 | 6.2 | 4.1 | 242 | 26 | 35 | 17 | 20 | 5.1 | 4.8 | 12 |
| 27 | 13 | 33 | 6.0 | 4.1 | 212 | 26 | 29 | 16 | 12 | 5.9 | 4.8 | 9.0 |
| 28 | 11 | 30 | 5.8 | 4.0 | 158 | 29 | 27 | 15 | 9.0 | 5.5 | 4.4 | 14 |
| 29 | 9.3 | 47 | 5.6 | 3.9 | --- | 27 | 28 | 15 | 7.9 | 5.5 | 4.4 | 12 |
| 30 | 8.9 | 38 | 5.4 | 3.8 | --- | 26 | 40 | 17 | 6.8 | 5.1 | 4.4 | 8.4 |
| 31 | 8.9 | --- | 5.4 | 3.7 | --- | 27 | --- | 35 | --- | 4.8 | 4.4 | --- |
| TOTAL | 202.9 | 473.6 | 392.4 | 116.6 | 4024.0 | 1312 | 1009 | 1383 | 351.3 | 237.2 | 134.2 | 223.0 |
| MEAN | 6.55 | 15.8 | 12.7 | 3.76 | 144 | 42.3 | 33.6 | 44.6 | 11.7 | 7.65 | 4.33 | 7.43 |
| MAX | 13 | 63 | 29 | 5.2 | 450 | 127 | 71 | 256 | 24 | 24 | 5.5 | 19 |
| MIN | 4.6 | 7.4 | 5.4 | 3.1 | 6.0 | 22 | 18 | 15 | 6.8 | 4.1 | 3.5 | 4.1 |
| CFSM | .20 | .49 | .39 | .12 | 4.42 | 1.30 | 1.03 | 1.37 | .36 | .24 | .13 | .23 |
| IN. | .23 | .54 | .45 | .13 | 4.59 | 1.50 | 1.15 | 1.58 | .40 | .27 | .15 | .25 |

CAL YR 1980 TOTAL 7232.6 MEAN 19.8 MAX 234 MIN 3.6 CFSM .61 IN 8.25
WTR YR 1981 TOTAL 9859.2 MEAN 27.0 MAX 450 MIN 3.1 CFSM .83 IN 11.25

## 01359918 SILVER CREEK AT DORMANSVILLE, NY

LOCATION.--Lat 42°29'17", long 73°58'56", Albany County, Hydrologic Unit 02020006, on left bank 17 ft (5.2 m) upstream from culvert on County Highway 411, 300 ft (91.4 m) downstream from unnamed tributary, 0.6 mi (0.97 km) upstream from mouth, and 1.0 mi (1.6 km) southeast of Dormansville.

DRAINAGE AREA.--2.90 mi² (7.51 km²).

PERIOD OF RECORD.--June 1978 to September 1981 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 720 ft (219 m), from topographic map.

REMARKS.--Records poor. Water diverted from Basic Creek Reservoir, through tunnel, enters basin upstream from station and is included in records of daily discharge.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 618 ft³/s (17.50 m³/s) Mar. 21, 1980, gage height 7.54 ft (2.298 m); minimum daily, 0.06 ft³/s (0.002 m³/s) many days in June, July, Aug. and Sept., 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 341 ft³/s (9.66 m³/s) Feb. 11, gage height 5.42 ft (1.652 m); minimum daily, 0.06 ft³/s (0.002 m³/s) many days in June, July, Aug. and Sept.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .30 | 1.2 | 5.2 | .58 | .30 | 18 | 53 | 4.5 | 3.8 | .06 | .06 | .06 |
| 2 | .40 | 1.1 | 4.0 | .58 | 6.0 | 52 | 7.7 | 3.4 | 4.5 | .06 | .06 | .06 |
| 3 | .50 | .80 | 2.8 | .58 | 11 | 77 | 3.8 | 3.1 | 4.3 | 6.7 | .06 | .06 |
| 4 | .70 | .80 | 1.5 | .56 | 5.2 | 75 | 3.1 | 37 | 4.1 | 3.8 | 1.1 | .06 |
| 5 | .50 | .80 | 1.0 | .54 | 2.5 | 73 | 3.4 | 96 | 2.4 | 24 | .55 | .06 |
| 6 | .34 | .55 | 1.0 | .52 | 1.9 | 50 | 3.4 | 92 | 2.2 | 57 | .06 | .06 |
| 7 | .29 | .55 | 1.0 | .49 | 1.7 | 3.8 | 2.4 | 88 | 2.0 | 8.0 | .06 | .06 |
| 8 | .28 | .30 | 1.8 | .48 | 1.6 | 3.7 | 2.4 | 83 | 2.0 | 3.1 | .06 | .06 |
| 9 | .28 | .41 | 3.1 | .46 | 1.5 | 3.7 | 2.4 | 78 | 1.6 | 2.0 | .06 | 9.0 |
| 10 | .28 | .55 | 2.4 | .45 | 1.4 | 3.7 | 2.8 | 73 | .80 | .80 | .06 | .06 |
| 11 | .28 | .55 | 1.8 | .43 | 70 | 3.7 | 2.6 | 38 | .41 | .30 | .06 | .06 |
| 12 | .29 | .55 | 1.2 | .41 | 120 | 3.1 | 2.4 | 23 | .30 | .17 | .06 | 1.2 |
| 13 | .30 | .55 | 1.0 | .40 | 110 | 3.1 | 3.1 | 55 | .06 | .30 | .06 | 2.8 |
| 14 | .31 | .41 | .92 | .38 | 100 | 3.1 | 19 | 52 | .06 | .06 | .06 | 4.5 |
| 15 | .32 | .41 | .82 | .36 | 96 | 2.6 | 49 | 33 | .92 | .06 | .06 | 3.7 |
| 16 | .32 | .55 | .82 | .36 | 92 | 2.5 | 48 | 48 | 1.4 | .06 | .06 | 1.6 |
| 17 | .30 | .41 | 1.1 | .35 | 92 | 2.4 | 48 | 46 | .66 | .06 | .06 | 1.6 |
| 18 | .55 | .45 | 16 | .33 | 92 | 2.0 | 47 | 41 | .17 | .06 | .06 | 1.6 |
| 19 | .80 | .50 | 110 | .33 | 92 | 1.8 | 46 | 36 | .06 | .06 | .06 | 1.1 |
| 20 | 1.1 | .66 | 97 | .33 | 185 | 1.6 | 46 | 32 | .06 | .17 | .06 | .92 |
| 21 | 1.8 | .80 | 94 | .34 | 221 | 1.4 | 45 | 28 | .06 | 2.2 | .06 | .41 |
| 22 | 1.4 | 1.6 | 68 | .35 | 263 | 1.6 | 44 | 26 | .30 | 1.2 | .06 | .66 |
| 23 | 1.4 | 1.6 | 2.4 | .35 | 248 | 1.6 | 26 | 23 | .30 | .55 | .06 | .17 |
| 24 | 1.4 | 1.2 | 1.2 | .35 | 298 | 1.8 | 3.8 | 20 | .06 | .30 | .06 | .08 |
| 25 | 5.0 | 3.6 | .88 | .34 | 241 | 2.0 | 2.8 | 17 | .30 | .08 | .06 | .55 |
| 26 | 5.2 | 5.0 | .74 | .33 | 233 | 2.0 | 2.0 | 19 | .30 | .06 | .06 | .55 |
| 27 | 2.8 | 3.6 | .62 | .32 | 140 | 42 | 3.4 | 27 | .06 | .06 | .06 | .66 |
| 28 | 2.6 | 5.0 | .58 | .31 | 11 | 84 | 2.0 | 15 | .06 | .06 | .06 | 1.4 |
| 29 | 2.4 | 10 | .54 | .30 | --- | 82 | 2.4 | 3.7 | .06 | .06 | .06 | 1.2 |
| 30 | 2.0 | 8.0 | .52 | .29 | --- | 81 | 4.5 | 3.7 | .06 | .06 | .06 | 1.1 |
| 31 | 1.6 | --- | .54 | .29 | --- | 78 | --- | 4.3 | --- | .06 | .06 | --- |
| TOTAL | 36.04 | 52.50 | 424.48 | 12.49 | 2737.10 | 763.2 | 531.4 | 1148.7 | 33.36 | 111.51 | 3.39 | 35.40 |
| MEAN | 1.16 | 1.75 | 13.7 | .40 | 97.8 | 24.6 | 17.7 | 37.1 | 1.11 | 3.60 | .11 | 1.18 |
| MAX | 5.2 | 10 | 110 | .58 | 298 | 84 | 53 | 96 | 4.5 | 57 | 1.1 | 9.0 |
| MIN | .28 | .30 | .52 | .29 | .30 | 1.4 | 2.0 | 3.1 | .06 | .06 | .06 | .06 |

CAL YR 1980 TOTAL 4600.28 MEAN 12.6 MAX 272 MIN .20
WTR YR 1981 TOTAL 5889.57 MEAN 16.1 MAX 298 MIN .06

## 01362198 ESOPUS CREEK AT SHANDAKEN, NY
(Hydrologic bench-mark station)

LOCATION.--Lat 42°06'59", long 74°23'20", Ulster County, Hydrologic Unit 02020006, on left bank 2,400 ft (732 m) downstream from bridge on State Highway 28, at Shandaken, 0.5 mi (0.8 km) downstream from Bushnellsville Creek, 0.5 mi (0.8 km) upstream from Fox Hollow Creek, and 5.2 mi (8.4 km) northwest of Phoenicia. Water-quality sampling site at discharge station.

DRAINAGE AREA.--59.5 $mi^2$ (154.1 $km^2$).

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,017.27 ft (310.064 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except for winter months and the period Feb. 20 to May 21 when orifice was torn out which are poor. Occasional slight regulation when filling or draining swimming pools or small ponds above station.

AVERAGE DISCHARGE.--18 years, 140 $ft^3/s$ (3.965 $m^3/s$), 31.95 in/yr (812 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,900 $ft^3/s$ (450 $m^3/s$) Mar. 21, 1980, gage height, 13.00 ft (3.962 m) from floodmarks, from rating curve extended above 2,200 $ft^3/s$ (62.3 $m^3/s$) on basis of slope-area measurement at gage height 10.88 ft (3.316 m); minimum, 2.8 $ft^3/s$ (0.079 $m^3/s$) Nov. 22, 23, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,100 $ft^3/s$ (31 $m^3/s$) and maximum (*):

| Date | Time | Discharge ($ft^3/s$) | Discharge ($m^3/s$) | Gage height (ft) | Gage height (m) | Date | Time | Discharge ($ft^3/s$) | Discharge ($m^3/s$) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 2 | 1215 | ice jam | | 7.82 | 2.384 | Feb. 20 | Unknown | *6,540 | 185 | *10.25 | 3.124 |
| Feb. 11 | 1615 | ice jam | | 7.78 | 2.371 | May 12 | 0515 | 1,870 | 53.0 | 7.65 | 2.332 |

Minimum discharge, 4.3 $ft^3/s$ (0.122 $m^3/s$) Oct. 18.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.2 | 12 | 82 | 29 | 16 | 249 | 74 | 96 | 72 | 30 | 24 | 12 |
| 2 | 6.2 | 11 | 82 | 28 | 120 | 212 | 260 | 96 | 69 | 82 | 21 | 12 |
| 3 | 6.8 | 11 | 93 | 28 | 630 | 189 | 220 | 96 | 65 | 93 | 21 | 14 |
| 4 | 8.4 | 10 | 130 | 27 | 350 | 173 | 190 | 95 | 70 | 80 | 26 | 13 |
| 5 | 6.5 | 10 | 230 | 26 | 290 | 156 | 210 | 95 | 64 | 146 | 23 | 11 |
| 6 | 5.7 | 10 | 170 | 25 | 210 | 142 | 198 | 95 | 59 | 135 | 21 | 11 |
| 7 | 5.5 | 10 | 153 | 25 | 160 | 128 | 184 | 90 | 55 | 114 | 18 | 11 |
| 8 | 5.2 | 10 | 153 | 24 | 140 | 119 | 173 | 86 | 53 | 100 | 21 | 21 |
| 9 | 5.2 | 11 | 157 | 23 | 130 | 106 | 171 | 83 | 52 | 92 | 20 | 78 |
| 10 | 5.0 | 13 | 157 | 23 | 140 | 98 | 163 | 80 | 51 | 103 | 18 | 40 |
| 11 | 6.0 | 13 | 146 | 22 | 450 | 95 | 149 | 153 | 48 | 106 | 18 | 21 |
| 12 | 6.0 | 13 | 130 | 21 | 393 | 90 | 139 | 1180 | 45 | 86 | 17 | 12 |
| 13 | 6.2 | 13 | 120 | 20 | 133 | 88 | 130 | 877 | 51 | 74 | 15 | 9.9 |
| 14 | 6.5 | 13 | 110 | 19 | 75 | 83 | 139 | 580 | 62 | 74 | 12 | 14 |
| 15 | 6.0 | 13 | 100 | 18 | 48 | 78 | 142 | 456 | 66 | 65 | 14 | 45 |
| 16 | 5.7 | 13 | 94 | 17 | 34 | 75 | 133 | 471 | 59 | 55 | 47 | 26 |
| 17 | 5.7 | 12 | 88 | 16 | 30 | 72 | 131 | 380 | 53 | 47 | 34 | 19 |
| 18 | 4.7 | 13 | 82 | 16 | 30 | 70 | 126 | 324 | 44 | 39 | 25 | 13 |
| 19 | 5.0 | 13 | 76 | 15 | 37 | 70 | 117 | 280 | 43 | 34 | 21 | 12 |
| 20 | 4.7 | 13 | 70 | 15 | 1750 | 64 | 112 | 240 | 43 | 53 | 18 | 11 |
| 21 | 4.7 | 14 | 66 | 15 | 1520 | 65 | 104 | 198 | 50 | 76 | 16 | 9.9 |
| 22 | 4.3 | 14 | 58 | 15 | 935 | 58 | 100 | 173 | 57 | 48 | 15 | 12 |
| 23 | 4.7 | 14 | 50 | 15 | 642 | 55 | 100 | 149 | 55 | 35 | 14 | 17 |
| 24 | 4.7 | 37 | 45 | 15 | 827 | 53 | 104 | 131 | 48 | 29 | 17 | 26 |
| 25 | 16 | 137 | 33 | 15 | 591 | 52 | 96 | 117 | 43 | 26 | 17 | 28 |
| 26 | 50 | 99 | 30 | 15 | 456 | 50 | 92 | 111 | 35 | 26 | 13 | 25 |
| 27 | 26 | 86 | 30 | 15 | 355 | 51 | 88 | 101 | 32 | 37 | 12 | 23 |
| 28 | 19 | 86 | 30 | 15 | 294 | 51 | 85 | 92 | 30 | 26 | 11 | 27 |
| 29 | 15 | 99 | 30 | 15 | --- | 49 | 92 | 93 | 29 | 36 | 10 | 23 |
| 30 | 14 | 89 | 30 | 15 | --- | 51 | 103 | 85 | 30 | 35 | 11 | 21 |
| 31 | 12 | --- | 29 | 15 | --- | 62 | --- | 83 | --- | 29 | 13 | --- |
| TOTAL | 287.6 | 912 | 2854 | 602 | 10786 | 2954 | 4125 | 7186 | 1533 | 2011 | 583 | 617.8 |
| MEAN | 9.28 | 30.4 | 92.1 | 19.4 | 385 | 95.3 | 138 | 232 | 51.1 | 64.9 | 18.8 | 20.6 |
| MAX | 50 | 137 | 230 | 29 | 1750 | 249 | 260 | 1180 | 72 | 146 | 47 | 78 |
| MIN | 4.3 | 10 | 29 | 15 | 16 | 49 | 74 | 80 | 29 | 26 | 10 | 9.9 |
| CFSM | .16 | .51 | 1.55 | .33 | 6.47 | 1.60 | 2.32 | 3.90 | .86 | 1.09 | .32 | .35 |
| IN. | .18 | .57 | 1.78 | .38 | 6.74 | 1.85 | 2.58 | 4.49 | .96 | 1.26 | .36 | .39 |

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CAL YR 1980   TOTAL  40076.7   MEAN  109    MAX  4100   MIN 4.3   CFSM 1.83   IN 25.06
WTR YR 1981   TOTAL  34451.4   MEAN   94.4  MAX  1750   MIN 4.3   CFSM 1.59   IN 21.54
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## 01362198 ESOPUS CREEK AT SHANDAKEN, NY--Continued

### WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.
  CHEMICAL DATA: 1963-65 (a), 1966-67 (b), 1968-81 (d).
  MINOR ELEMENT DATA: 1964-65, 1967-73, 1975-76 (a), 1977 (b), 1978-81 (a).
  RADIOCHEMICAL DATA: 1967-77, 1979-81 (a).
  PESTICIDE DATA: 1967-72, 1974-77, 1979-81 (a).
  ORGANIC DATA: OC--1979 (a), 1981 (c).
    PCB--1974-77, 1979-81 (a).
    PCN--1977, 1979-81 (a).
  NUTRIENT DATA: 1968 (a), 1969-71 (d), 1972 (c), 1974 (a), 1975-81 (d).
  BIOLOGICAL DATA:
    Bacteria--1968-69 (d), 1970-72 (c), 1973-81 (d).
  SEDIMENT DATA: 1969-71 (c), 1972-75, 1977-81 (d).

PERIOD OF DAILY RECORD.--
  WATER TEMPERATURE: July 1963 to July 1968, January 1970 to current year.

INSTRUMENTATION.--Temperature recorder since July 1963.

REMARKS.--No temperature record Nov. 17 to Jan. 14, Mar. 18-31, June 1 to Sept. 30, due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
  WATER TEMPERATURES: Maximum (water years 1964-68, 1970-76, 1978-80), 28.5°C Aug. 16, 1965, Aug. 9, 1980; minimum, freezing point on many days during winter periods except water years 1967 and 1976.

EXTREMES FOR CURRENT YEAR.--
  WATER TEMPERATURES: Minimum, freezing point on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS (CFS) | SPE-CIFIC CON-DUCT-ANCE (UMHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | BARO-METRIC PRES-SURE (MM OF HG) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) | STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) | HARD-NESS (MG/L AS CACO3) | HARD-NESS NONCAR-BONATE (MG/L AS CACO3) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | | | |
| 16... | 1500 | 5.7 | 74 | 6.4 | 11.0 | 740 | 9.3 | 98 | 100 | 25 | — | — |
| NOV | | | | | | | | | | | | |
| 05... | 1300 | 11 | 74 | 5.9 | 7.0 | 730 | 11.6 | 104 | 28 | 22 | 26 | 7.0 |
| DEC | | | | | | | | | | | | |
| 03... | 1430 | 96 | 47 | 5.8 | 2.0 | 720 | 12.6 | 100 | K3 | K5 | 17 | .00 |
| JAN | | | | | | | | | | | | |
| 14... | 1030 | 18 | 57 | 7.1 | .0 | 736 | 13.8 | 100 | K1 | K1 | 20 | 3.0 |
| FEB | | | | | | | | | | | | |
| 04... | 1100 | 408 | 43 | 6.4 | .0 | — | 14.0 | 102 | <1 | K11 | 13 | 7.0 |
| MAR | | | | | | | | | | | | |
| 02... | 1530 | 200 | 43 | 5.6 | 4.0 | 726 | 11.9 | 92 | K7 | K2 | 11 | 3.0 |
| APR | | | | | | | | | | | | |
| 07... | 1400 | 181 | 49 | 7.3 | 9.0 | 743 | 11.4 | 100 | <1 | K3 | 16 | .00 |
| MAY | | | | | | | | | | | | |
| 06... | 1430 | 93 | 33 | 6.4 | 12.0 | 730 | 10.3 | 104 | K1 | K3 | 16 | 10 |
| JUN | | | | | | | | | | | | |
| 03... | 1300 | 67 | 50 | 6.1 | 12.5 | 737 | 9.8 | 99 | K30 | 29 | 18 | 3.0 |
| 30... | 1500 | 31 | 52 | 6.3 | 24.5 | 741 | 7.7 | 96 | K19 | 25 | 21 | 8.0 |
| JUL | | | | | | | | | | | | |
| 29... | 1100 | 37 | 46 | 6.7 | 18.0 | 732 | 9.2 | 105 | 29 | 40 | 21 | 8.0 |
| AUG | | | | | | | | | | | | |
| 26... | 1100 | 13 | 72 | 6.7 | 18.0 | 740 | 9.0 | 106 | 100 | 67 | 25 | 5.0 |

K Results based on colony count outside the acceptable range (non-ideal colony count).

## 01362198 ESOPUS CREEK AT SHANDAKEN, NY--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | ALKA-LINITY LAB (MG/L AS CACO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 16... | — | — | — | — | — | — | — | — | — | — | — | — |
| NOV 05... | 7.6 | 1.6 | 3.3 | .5 | 19 | 8.0 | 5.5 | .1 | 2.1 | 40 | 42 | .35 |
| DEC 03... | 4.9 | 1.2 | 2.0 | .3 | 18 | 7.6 | 4.0 | .0 | 2.3 | 32 | 36 | .67 |
| JAN 14... | 5.9 | 1.3 | 2.6 | .3 | 17 | 7.1 | 4.2 | <.1 | 2.5 | 36 | 37 | .54 |
| FEB 04... | 4.2 | .7 | 1.5 | .3 | 6.0 | 6.8 | 3.4 | <.1 | 1.0 | 33 | 25 | .82 |
| MAR 02... | 4.1 | 1.1 | 2.1 | .4 | 8.0 | 7.1 | 3.6 | <.1 | 3.0 | 38 | 28 | .49 |
| APR 07... | 4.7 | 1.1 | 2.0 | .3 | 16 | 7.3 | 3.6 | <.1 | 2.2 | 33 | 33 | .45 |
| MAY 06... | 4.7 | 1.1 | 1.9 | .4 | 6.0 | 7.0 | 3.7 | <.1 | 2.3 | 30 | 26 | .20 |
| JUN 03... | 5.3 | 1.1 | 2.0 | .2 | 15 | 7.4 | 3.6 | <.1 | 2.8 | 37 | 32 | .13 |
| 30... | 6.4 | 1.3 | 2.6 | .5 | 13 | 7.3 | 4.3 | <.1 | 3.1 | 38 | 34 | .13 |
| JUL 29... | 6.2 | 1.3 | 2.8 | .4 | 13 | 6.9 | 3.7 | <.1 | 3.3 | — | 33 | .09 |
| AUG 26... | 7.5 | 1.6 | 3.2 | .5 | 20 | 6.6 | 4.8 | <.1 | 3.5 | 36 | 40 | .05 |

| DATE | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) | NITRO-GEN, ORGANIC TOTAL (MG/L AS N) | NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) | NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) | NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) | NITRO-GEN, TOTAL (MG/L AS N) | NITRO-GEN DIS-SOLVED (MG/L AS N) | PHOS-PHORUS, TOTAL (MG/L AS P) | PHOS-PHORUS, DIS-SOLVED (MG/L AS P) | ARSENIC TOTAL (UG/L AS AS) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 16... | — | — | — | — | — | — | — | — | — | — | — | — |
| NOV 05... | .36 | .040 | .000 | .00 | .05 | .03 | .05 | .38 | .41 | .010 | .010 | — |
| DEC 03... | .67 | .000 | .000 | .09 | .11 | .09 | .11 | .76 | .78 | .050 | .000 | — |
| JAN 14... | .55 | <.010 | .010 | — | .66 | .58 | .67 | 1.1 | 1.2 | <.010 | <.010 | — |
| FEB 04... | .81 | .030 | <.010 | .22 | — | .25 | .21 | 1.1 | 1.0 | .020 | .010 | — |
| MAR 02... | .47 | .080 | .080 | — | — | <.10 | <.10 | — | — | .040 | <.010 | 0 |
| APR 07... | .43 | .060 | .030 | — | .08 | <.10 | .11 | — | .54 | .060 | <.010 | — |
| MAY 06... | .21 | .010 | .030 | .11 | .11 | .12 | .14 | .32 | .35 | <.010 | .020 | — |
| JUN 03... | .14 | .010 | .030 | .37 | .15 | .38 | .18 | .51 | .32 | <.010 | .020 | 1 |
| 30... | .14 | .040 | .050 | .45 | .39 | .49 | .44 | .62 | .58 | .030 | .010 | — |
| JUL 29... | .07 | <.010 | .030 | — | .09 | .07 | .12 | .16 | .19 | <.010 | .020 | — |
| AUG 26... | .12 | .050 | .260 | .28 | .28 | .33 | .54 | .38 | .66 | .040 | <.010 | — |

## 01362198 ESOPUS CREEK AT SHANDAKEN, NY--Continued

### WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | ARSENIC DIS-SOLVED (UG/L AS AS) | BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) | BARIUM, DIS-SOLVED (UG/L AS BA) | BERYL-LIUM, DIS-SOLVED (UG/L AS BE) | CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) | CADMIUM DIS-SOLVED (UG/L AS CD) | CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) | CHRO-MIUM, DIS-SOLVED (UG/L AS CR) | COBALT, DIS-SOLVED (UG/L AS CO) | COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) | COPPER, DIS-SOLVED (UG/L AS CU) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MAR<br>02... | 0 | 100 | 20 | <1 | 0 | <1 | 20 | 0 | <3 | 2 | <10 |
| JUN<br>03... | 2 | 100 | 20 | <1 | 1 | <1 | 10 | 3 | <3 | 22 | <10 |

| DATE | IRON, TOTAL RECOV-ERABLE (UG/L AS FE) | IRON, DIS-SOLVED (UG/L AS FE) | LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) | LEAD, DIS-SOLVED (UG/L AS PB) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) | MERCURY DIS-SOLVED (UG/L AS HG) | MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) | SELE-NIUM, TOTAL (UG/L AS SE) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MAR<br>02... | 280 | 11 | 3 | <10 | <4 | 10 | 2 | .2 | .2 | <10 | 0 |
| JUN<br>03... | 210 | <3 | 2 | <10 | 4 | 10 | 2 | <.1 | <.1 | <10 | 0 |

| DATE | SELE-NIUM, DIS-SOLVED (UG/L AS SE) | SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) | SILVER, DIS-SOLVED (UG/L AS AG) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) | VANA-DIUM, DIS-SOLVED (UG/L AS V) | ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) | ZINC, DIS-SOLVED (UG/L AS ZN) | CARBON, ORGANIC TOTAL (MG/L AS C) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) | CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) | CYANIDE TOTAL (MG/L AS CN) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| NOV<br>05... | -- | -- | -- | -- | -- | -- | -- | .8 | -- | -- | -- |
| FEB<br>04... | -- | -- | -- | -- | -- | -- | -- | 1.8 | -- | -- | -- |
| MAR<br>02... | 0 | 0 | 0 | 14 | <6.0 | 30 | <4 | -- | 5.6 | .2 | -- |
| APR<br>07... | -- | -- | -- | -- | -- | -- | -- | 4.2 | -- | -- | -- |
| MAY<br>06... | -- | -- | -- | -- | -- | -- | -- | 1.1 | -- | -- | -- |
| JUN<br>03... | 0 | 0 | 0 | 17 | <6.0 | 10 | 4 | -- | 2.1 | -- | <.01 |
| 30... | -- | -- | -- | -- | -- | -- | -- | 5.8 | -- | -- | -- |
| JUL<br>29... | -- | -- | -- | -- | -- | -- | -- | 1.3 | -- | -- | -- |
| AUG<br>26... | -- | -- | -- | -- | -- | -- | -- | 1.3 | -- | -- | -- |

## 01362198 ESOPUS CREEK AT SHANDAKEN, NY--Continued

### PESTICIDE ANALYSES, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | PCB, TOTAL (UG/L) | PCB, TOTAL IN BOTTOM MATERIAL (UG/KG) | NAPHTHALENES, POLYCHLOR. TOTAL (UG/L) | PCN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ALDRIN, TOTAL (UG/L) | ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | CHLORDANE, TOTAL (UG/L) | CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDD, TOTAL (UG/L) | DDD, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDE, TOTAL (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| JUN | | | | | | | | | | | |
| 03... | <.10 | <1 | <.10 | <1.0 | <.01 | <.1 | <.10 | <1.0 | <.01 | <.1 | <.01 |

| DATE | DDE, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDT, TOTAL (UG/L) | DDT, TOTAL IN BOTTOM MATERIAL (UG/KG) | DIAZINON, TOTAL (UG/L) | DIELDRIN TOTAL (UG/L) | DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ENDOSULFAN, TOTAL (UG/L) | ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ENDRIN, TOTAL (UG/L) | ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ETHION, TOTAL (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| JUN | | | | | | | | | | | |
| 03... | 2.6 | <.01 | 6.2 | <.01 | <.01 | <.1 | <.01 | <.1 | <.01 | <.1 | <.01 |

| DATE | HEPTACHLOR, TOTAL (UG/L) | HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG) | HEPTACHLOR EPOXIDE TOTAL (UG/L) | HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) | LINDANE TOTAL (UG/L) | LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG) | MALATHION, TOTAL (UG/L) | METHOXYCHLOR, TOTAL (UG/L) | METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG) | METHYL PARATHION, TOTAL (UG/L) | METHYL TRITHION, TOTAL (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| JUN | | | | | | | | | | | |
| 03... | <.01 | <.1 | <.01 | <.1 | <.01 | <.1 | <.01 | <.01 | <.1 | <.01 | <.01 |

| DATE | MIREX, TOTAL (UG/L) | MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG) | PARATHION, TOTAL (UG/L) | PERTHANE TOTAL (UG/L) | TOXAPHENE, TOTAL (UG/L) | TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG) | TOTAL TRITHION (UG/L) | 2,4-D, TOTAL (UG/L) | 2,4,5-T TOTAL (UG/L) | SILVEX, TOTAL (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| JUN | | | | | | | | | | |
| 03... | <.01 | <.1 | <.01 | <.01 | <0 | <1 | <.01 | <.01 | <.01 | <.01 |

### RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | GROSS ALPHA, DISSOLVED (UG/L AS U-NAT) | GROSS ALPHA, DISSOLVED (PCI/L AS U-NAT) | GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) | GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT) | GROSS BETA, DISSOLVED (PCI/L AS CS-137) | GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90) | GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) | GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) | RADIUM 226, DISSOLVED, RADON METHOD (PCI/L) | URANIUM DISSOLVED, EXTRACTION (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| JUN | | | | | | | | | | |
| 03... | <1.3 | .9 | <.4 | .3 | <1.0 | <.9 | <.4 | <.4 | .05 | .12 |

### SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | TIME | STREAMFLOW, INSTANTANEOUS (CFS) | SEDIMENT, SUSPENDED (MG/L) | SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) | DATE | TIME | STREAMFLOW, INSTANTANEOUS (CFS) | SEDIMENT, SUSPENDED (MG/L) | SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) |
|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | APR | | | | |
| 16... | 1500 | 5.7 | 0 | .00 | 07... | 1400 | 181 | 6 | 2.9 |
| NOV | | | | | MAY | | | | |
| 05... | 1300 | 11 | 1 | .03 | 06... | 1430 | 93 | 1 | .25 |
| DEC | | | | | JUN | | | | |
| 03... | 1430 | 96 | 4 | 1.0 | 03... | 1300 | 67 | 4 | .72 |
| JAN | | | | | 30... | 1500 | 31 | 2 | .17 |
| 14... | 1030 | 18 | 1 | .05 | JUL | | | | |
| FEB | | | | | 29... | 1100 | 37 | 1 | .10 |
| 04... | 1100 | 408 | 10 | 11 | AUG | | | | |
| MAR | | | | | 26... | 1100 | 13 | 5 | .18 |
| 02... | 1530 | 200 | 5 | 2.7 | | | | | |

## 01362198 ESOPUS CREEK AT SHANDAKEN, NY--Continued

### TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 16.5 | 11.5 | 14.0 | 7.5 | 5.5 | 6.5 | | | | --- | --- | --- |
| 2 | 14.5 | 12.5 | 13.5 | 6.5 | 4.5 | 5.5 | | | | --- | --- | --- |
| 3 | 14.5 | 12.0 | 13.5 | 6.5 | 3.5 | 4.5 | | | | --- | --- | --- |
| 4 | 14.5 | 11.0 | 12.5 | 8.0 | 5.5 | 7.0 | | | | --- | --- | --- |
| 5 | 14.0 | 9.0 | 11.5 | 7.5 | 5.0 | 6.5 | | | | --- | --- | --- |
| 6 | 13.0 | 8.5 | 11.0 | 6.5 | 4.0 | 5.0 | | | | --- | --- | --- |
| 7 | 13.0 | 9.5 | 11.0 | 8.5 | 5.5 | 7.0 | | | | --- | --- | --- |
| 8 | 13.0 | 8.0 | 11.0 | 9.0 | 5.0 | 8.0 | | | | --- | --- | --- |
| 9 | 13.5 | 9.5 | 11.5 | 5.5 | 4.0 | 4.5 | | | | --- | --- | --- |
| 10 | 11.0 | 7.0 | 9.5 | 5.5 | 3.0 | 5.0 | | | | --- | --- | --- |
| 11 | 13.5 | 10.5 | 11.5 | 3.0 | 2.0 | 2.5 | | | | --- | --- | --- |
| 12 | 10.5 | 9.0 | 10.0 | 3.5 | 1.5 | 2.5 | | | | --- | --- | --- |
| 13 | 10.0 | 7.5 | 8.5 | 5.0 | 1.5 | 3.0 | | | | --- | --- | --- |
| 14 | 9.5 | 7.0 | 8.0 | 7.0 | 4.5 | 5.5 | | | | --- | --- | --- |
| 15 | 8.5 | 7.0 | 8.0 | 5.5 | 4.0 | 5.0 | | | | .0 | .0 | .0 |
| 16 | 12.0 | 7.5 | 10.0 | 4.0 | 1.5 | 3.0 | | | | .0 | .0 | .0 |
| 17 | 14.0 | 9.5 | 11.5 | --- | --- | --- | | | | .0 | .0 | .0 |
| 18 | 15.5 | 12.5 | 14.0 | --- | --- | --- | | | | .0 | .0 | .0 |
| 19 | 14.0 | 11.5 | 12.5 | --- | --- | --- | | | | .0 | .0 | .0 |
| 20 | 12.0 | 9.0 | 10.5 | --- | --- | --- | | | | .0 | .0 | .0 |
| 21 | 10.5 | 8.0 | 9.0 | --- | --- | --- | | | | .0 | .0 | .0 |
| 22 | 9.0 | 6.5 | 8.0 | --- | --- | --- | | | | .0 | .0 | .0 |
| 23 | 8.0 | 5.5 | 6.5 | --- | --- | --- | | | | .0 | .0 | .0 |
| 24 | 7.5 | 3.5 | 5.5 | --- | --- | --- | | | | .0 | .0 | .0 |
| 25 | 9.5 | 6.5 | 7.5 | --- | --- | --- | | | | .0 | .0 | .0 |
| 26 | 9.0 | 7.5 | 8.5 | --- | --- | --- | | | | .0 | .0 | .0 |
| 27 | 9.0 | 6.5 | 7.5 | --- | --- | --- | | | | .0 | .0 | .0 |
| 28 | 8.5 | 7.5 | 8.0 | --- | --- | --- | | | | .5 | .0 | .0 |
| 29 | 7.5 | 6.5 | 7.0 | --- | --- | --- | | | | .5 | .0 | .0 |
| 30 | 7.5 | 6.0 | 6.5 | --- | --- | --- | | | | .0 | .0 | .0 |
| 31 | 7.5 | 4.5 | 6.0 | --- | --- | --- | | | | .0 | .0 | .0 |
| MONTH | 16.5 | 3.5 | 10.0 | 9.0 | 1.5 | 5.0 | | | | .5 | .0 | .0 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | .0 | .0 | .0 | 4.5 | 4.0 | 4.5 | 9.5 | 8.5 | 9.0 | 10.5 | 6.0 | 8.5 |
| 2 | .0 | .0 | .0 | 4.5 | 3.0 | 4.0 | 10.0 | 6.5 | 8.0 | 8.5 | 7.0 | 8.0 |
| 3 | .5 | .0 | .0 | 4.0 | 1.5 | 2.5 | 12.0 | 5.0 | 8.0 | 13.0 | 5.5 | 9.0 |
| 4 | .0 | .0 | .0 | 3.5 | 1.0 | 2.5 | 11.0 | 8.0 | 9.5 | 14.0 | 6.5 | 10.5 |
| 5 | .0 | .0 | .0 | 3.5 | 2.5 | 3.0 | 10.5 | 9.0 | 10.0 | 15.5 | 9.5 | 12.5 |
| 6 | .0 | .0 | .0 | 5.0 | 2.0 | 3.0 | 9.0 | 5.5 | 7.0 | 12.5 | 9.5 | 11.0 |
| 7 | .0 | .0 | .0 | 4.0 | 2.0 | 3.0 | 11.0 | 4.0 | 7.0 | 12.5 | 7.5 | 10.0 |
| 8 | 2.5 | .0 | 1.0 | 4.0 | 3.0 | 3.5 | 12.5 | 5.5 | 8.5 | 12.5 | 8.0 | 10.5 |
| 9 | .5 | .0 | .0 | 5.0 | 3.0 | 4.0 | 10.5 | 7.5 | 9.0 | 12.5 | 9.5 | 11.0 |
| 10 | .0 | .0 | .0 | 5.0 | 3.0 | 4.0 | 12.5 | 6.0 | 9.0 | 13.0 | 10.0 | 11.5 |
| 11 | 2.5 | .0 | 1.5 | 5.0 | 3.0 | 4.0 | 11.0 | 7.0 | 9.0 | 13.0 | 10.5 | 12.0 |
| 12 | 2.0 | .5 | 1.0 | 4.0 | 2.5 | 3.5 | 11.0 | 8.0 | 9.0 | 10.5 | 8.5 | 9.5 |
| 13 | 2.0 | .5 | 1.0 | 5.0 | 3.0 | 4.0 | 12.0 | 7.0 | 9.0 | 11.0 | 7.0 | 8.5 |
| 14 | 3.5 | .5 | 1.5 | 4.0 | 2.5 | 3.0 | 8.0 | 6.0 | 7.0 | 12.5 | 7.0 | 9.0 |
| 15 | 4.0 | 1.0 | 2.0 | 4.0 | 2.0 | 3.0 | 9.5 | 4.5 | 6.5 | 12.0 | 9.0 | 10.0 |
| 16 | 5.0 | 1.5 | 3.0 | 3.5 | 3.0 | 3.5 | 10.5 | 4.0 | 7.0 | 11.0 | 8.5 | 9.5 |
| 17 | 5.5 | 3.5 | 4.0 | 3.5 | 3.0 | 3.0 | 9.0 | 5.5 | 7.0 | 12.5 | 7.5 | 9.5 |
| 18 | 6.5 | 3.5 | 5.0 | --- | --- | --- | 13.5 | 8.0 | 10.0 | 12.5 | 6.5 | 9.0 |
| 19 | 7.0 | 3.5 | 5.0 | --- | --- | --- | 11.5 | 6.0 | 8.5 | 12.5 | 6.5 | 9.0 |
| 20 | 5.5 | 4.5 | 5.0 | --- | --- | --- | 10.0 | 5.0 | 7.5 | 14.0 | 7.0 | 10.0 |
| 21 | 6.0 | 4.5 | 5.0 | --- | --- | --- | 9.5 | 3.0 | 6.0 | 14.5 | 7.5 | 10.5 |
| 22 | 6.5 | 5.5 | 6.0 | --- | --- | --- | 11.0 | 3.5 | 7.0 | 15.5 | 8.5 | 11.5 |
| 23 | 6.0 | 5.5 | 5.5 | --- | --- | --- | 6.5 | 5.5 | 6.0 | 16.0 | 8.5 | 12.0 |
| 24 | 7.0 | 5.5 | 6.0 | --- | --- | --- | 9.0 | 5.5 | 7.0 | 16.5 | 8.5 | 12.5 |
| 25 | 5.5 | 4.5 | 5.0 | --- | --- | --- | 7.5 | 5.5 | 6.5 | 17.5 | 10.0 | 13.5 |
| 26 | 5.0 | 4.0 | 4.5 | --- | --- | --- | 8.5 | 5.0 | 6.5 | 18.0 | 11.5 | 14.5 |
| 27 | 6.5 | 3.5 | 4.5 | --- | --- | --- | 9.0 | 6.5 | 8.0 | 18.0 | 12.5 | 15.0 |
| 28 | 4.5 | 3.0 | 4.0 | --- | --- | --- | 9.0 | 7.5 | 8.5 | 16.5 | 13.0 | 14.5 |
| 29 | --- | --- | --- | --- | --- | --- | 11.0 | 8.5 | 9.0 | 16.0 | 13.0 | 14.5 |
| 30 | --- | --- | --- | --- | --- | --- | 10.0 | 7.5 | 8.5 | 18.5 | 13.0 | 15.5 |
| 31 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 18.0 | 13.5 | 15.0 |
| MONTH | 7.0 | .0 | 2.5 | 5.0 | 1.0 | 3.5 | 13.5 | 3.0 | 3.0 | 18.5 | 5.5 | 11.0 |

## 01362500 ESOPUS CREEK AT COLDBROOK, NY

LOCATION.--Lat 42°00'51", long 74°16'16", Ulster County, Hydrologic Unit 02020006, on left bank at downstream side of bridge on Coldbrook Road, in Coldbrook, 0.3 mi (0.5 km) downstream from Little Beaver Kill, 1.5 mi (2.4 km) upstream from Ashokan Reservoir, and 2.5 mi (4.0 km) south of Mount Tremper.

DRAINAGE AREA.--192 $mi^2$ (497 $km^2$).

PERIOD OF RECORD.--January 1914 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 621.54 ft (189.445 m) National Geodetic Vertical Datum of 1929. Prior to June 15, 1916, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for winter periods, which are poor. Since 1924, water diverted from Schoharie Reservoir through Shandaken Tunnel (see Reservoirs in Hudson River Basin) enters Esopus Creek 10.5 mi (16.9 km) above station and is included in records of daily discharge.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 65,300 $ft^3/s$ (1,850 $m^3/s$) Mar. 21, 1980, gage height, 21.94 ft (6.687 m), from rating curve extended above 13,000 $ft^3/s$ (368 $m^3/s$) on basis of slope-area measurements at gage heights 12.39 ft (3.776 m), 15.15 ft (4.618 m), and 20.70 ft (6.309 m); minimum daily, 8 $ft^3/s$ (0.23 $m^3/s$) Oct. 14, 1914.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 26,400 $ft^3/s$ (748 $m^3/s$) Feb. 20, gage height, 15.63 ft (4.764 m); minimum daily, 26 $ft^3/s$ (.74 $m^3/s$) Oct. 24; minimum gage height, 3.30 ft (1.006 m) Oct. 10, 11, 18, 24, 25.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 34 | 83 | 648 | 200 | 250 | 1740 | 1110 | 1110 | 525 | 283 | 283 | 252 |
| 2 | 34 | 90 | 631 | 200 | 3800 | 1630 | 1360 | 1100 | 463 | 423 | 279 | 248 |
| 3 | 40 | 86 | 580 | 190 | 2590 | 1520 | 1330 | 1090 | 458 | 849 | 279 | 256 |
| 4 | 53 | 68 | 560 | 190 | 1870 | 1450 | 1300 | 1020 | 504 | 764 | 307 | 241 |
| 5 | 45 | 64 | 540 | 180 | 1610 | 1400 | 1330 | 714 | 823 | 1490 | 299 | 233 |
| 6 | 40 | 61 | 520 | 180 | 1400 | 1350 | 1380 | 519 | 1020 | 1220 | 287 | 233 |
| 7 | 37 | 61 | 518 | 170 | 1300 | 1310 | 1340 | 504 | 1000 | 974 | 283 | 241 |
| 8 | 36 | 61 | 503 | 170 | 1200 | 1290 | 1320 | 493 | 797 | 803 | 287 | 488 |
| 9 | 31 | 63 | 515 | 160 | 1100 | 1270 | 1310 | 478 | 386 | 678 | 283 | 1160 |
| 10 | 29 | 70 | 518 | 150 | 1000 | 1260 | 1300 | 463 | 372 | 585 | 275 | 519 |
| 11 | 31 | 68 | 491 | 130 | 5380 | 1240 | 1270 | 1450 | 363 | 504 | 271 | 409 |
| 12 | 31 | 64 | 450 | 120 | 3500 | 1210 | 1250 | 6890 | 359 | 458 | 271 | 363 |
| 13 | 31 | 64 | 450 | 110 | 2100 | 1210 | 995 | 3350 | 377 | 419 | 263 | 332 |
| 14 | 30 | 64 | 400 | 110 | 1800 | 1180 | 368 | 2240 | 458 | 395 | 283 | 328 |
| 15 | 29 | 63 | 350 | 120 | 1670 | 1170 | 377 | 1980 | 519 | 368 | 423 | 448 |
| 16 | 29 | 63 | 330 | 120 | 1530 | 1150 | 727 | 2230 | 409 | 345 | 443 | 381 |
| 17 | 27 | 63 | 320 | 120 | 1510 | 1140 | 1240 | 1910 | 363 | 341 | 377 | 363 |
| 18 | 29 | 64 | 310 | 130 | 1550 | 1130 | 1220 | 1660 | 332 | 458 | 275 | 345 |
| 19 | 31 | 64 | 290 | 140 | 1680 | 1110 | 1200 | 1320 | 324 | 448 | 267 | 341 |
| 20 | 31 | 64 | 260 | 130 | 13200 | 1110 | 1180 | 1210 | 315 | 443 | 263 | 328 |
| 21 | 29 | 66 | 250 | 130 | 5970 | 1090 | 1160 | 1130 | 350 | 400 | 256 | 311 |
| 22 | 28 | 70 | 250 | 140 | 3850 | 1080 | 1140 | 1020 | 381 | 337 | 252 | 287 |
| 23 | 29 | 77 | 240 | 140 | 2920 | 1080 | 1140 | 897 | 381 | 324 | 252 | 311 |
| 24 | 26 | 151 | 230 | 130 | 4830 | 1080 | 1160 | 836 | 345 | 315 | 252 | 324 |
| 25 | 133 | 509 | 210 | 130 | 3070 | 1070 | 1130 | 784 | 350 | 311 | 252 | 315 |
| 26 | 320 | 377 | 210 | 130 | 2480 | 1060 | 1110 | 739 | 345 | 311 | 248 | 287 |
| 27 | 127 | 493 | 210 | 140 | 2110 | 1060 | 1090 | 714 | 328 | 337 | 241 | 283 |
| 28 | 108 | 574 | 200 | 130 | 1900 | 1050 | 1080 | 678 | 311 | 311 | 241 | 315 |
| 29 | 108 | 727 | 190 | 130 | --- | 1050 | 1100 | 708 | 303 | 328 | 237 | 295 |
| 30 | 140 | 684 | 190 | 130 | --- | 1060 | 1130 | 579 | 287 | 311 | 248 | 283 |
| 31 | 131 | --- | 190 | 140 | --- | 1090 | --- | 574 | --- | 299 | 267 | --- |
| TOTAL | 1857 | 5076 | 11554 | 4490 | 77170 | 37640 | 34147 | 40390 | 13548 | 15832 | 8744 | 10520 |
| MEAN | 59.9 | 169 | 373 | 145 | 2756 | 1214 | 1138 | 1303 | 452 | 511 | 282 | 351 |
| MAX | 320 | 727 | 648 | 200 | 13200 | 1740 | 1380 | 6890 | 1020 | 1490 | 443 | 1160 |
| MIN | 26 | 61 | 190 | 110 | 250 | 1050 | 368 | 463 | 287 | 283 | 237 | 233 |

CAL YR 1980 TOTAL 201152 MEAN 550 MAX 22100 MIN 26
WTR YR 1981 TOTAL 260968 MEAN 715 MAX 13200 MIN 26

## 01364500 ESOPUS CREEK AT MOUNT MARION, NY

LOCATION.--Lat 42°02'16", long 73°58'21", Ulster County, Hydrologic Unit 0200006, on left bank at downstream side of bridge on Glasco Turnpike, 0.8 mi (1.3 km) east of Mount Marion, 1.6 mi (2.6 km) downstream from Plattekill Creek, and 4.5 mi (7.2 km) upstream from mouth.

DRAINAGE AREA.--419 $mi^2$ (1,085 $km^2$).

PERIOD OF RECORD.--May 1907 to March 1918 (monthly discharge only, published in WSP 1302) occasional miscellaneous measurements, 1951, 1956, 1966, 1967, 1969. March 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 40.16 ft (12.241 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 12, 1970, nonrecording gage at same site (at different datum May 1907 to March 1908, and at present datum June 9, 1966 to Aug. 12, 1970).

REMARKS.--Records good except those for winter periods, which are poor. Flow from 256 $mi^2$ (663 $km^2$) of drainage area regulated by Ashokan Reservoir since Sept. 9, 1913. Water diverted from Schoharie Creek through Shandaken Tunnel (see Reservoirs in Hudson River Basin) since Feb. 3, 1924, enters Esopus Creek about 12.2 mi (31.6 km) above Ashokan Reservoir. Diversion from Plattekill Creek for water supply of village of Saugerties. Diversions upstream during summer months for irrigation purposes. Diversions for water supply of city of New York made from Ashokan Reservoir (see Reservoirs in Hudson River Basin). Discharge records for this station now represent the natural flow from 112 $mi^2$ (290 $km^2$), together with spillage during high stages from the upstream reservoirs.

AVERAGE DISCHARGE.--11 years (1971-81), 555 $ft^3/s$ (15.72 $m^3/s$).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 28,000 $ft^3/s$ (793 $m^3/s$) Apr. 26, 1910, gage height, 25.10 ft (7.650 m), datum then in use; minimum, 9.7 $ft^3/s$ (0.27 $m^3/s$) Sept. 16, 17, 1980, gage height, 11.79 ft (3.594 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,870 $ft^3/s$ (280 $m^3/s$) Feb. 20, gage height, 21.10 ft (6.431 m); minimum discharge, 12 $ft^3/s$ (0.34 $m^3/s$) Oct. 2, 3, 23, 24, 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13 | 27 | 264 | 43 | 21 | 489 | 92 | 230 | 131 | 59 | 62 | 16 |
| 2 | 12 | 23 | 215 | 41 | 1200 | 407 | 194 | 200 | 113 | 92 | 55 | 20 |
| 3 | 13 | 22 | 190 | 38 | 1380 | 347 | 197 | 180 | 107 | 468 | 50 | 20 |
| 4 | 20 | 22 | 157 | 36 | 627 | 291 | 172 | 170 | 113 | 543 | 49 | 19 |
| 5 | 20 | 21 | 132 | 33 | 406 | 267 | 165 | 160 | 105 | 946 | 46 | 18 |
| 6 | 17 | 20 | 120 | 32 | 304 | 244 | 229 | 140 | 94 | 920 | 41 | 18 |
| 7 | 16 | 20 | 110 | 32 | 256 | 223 | 224 | 130 | 84 | 526 | 37 | 18 |
| 8 | 15 | 19 | 106 | 35 | 230 | 207 | 206 | 120 | 74 | 335 | 35 | 19 |
| 9 | 14 | 19 | 107 | 34 | 210 | 193 | 193 | 110 | 71 | 240 | 35 | 201 |
| 10 | 12 | 21 | 107 | 33 | 175 | 181 | 194 | 110 | 65 | 185 | 33 | 110 |
| 11 | 13 | 19 | 103 | 33 | 1260 | 169 | 180 | 150 | 60 | 147 | 31 | 69 |
| 12 | 14 | 18 | 90 | 32 | 2890 | 160 | 165 | 4000 | 57 | 122 | 34 | 57 |
| 13 | 13 | 19 | 87 | 32 | 1190 | 151 | 153 | 2800 | 66 | 105 | 33 | 48 |
| 14 | 13 | 19 | 80 | 32 | 715 | 140 | 165 | 1600 | 84 | 91 | 29 | 42 |
| 15 | 13 | 19 | 66 | 31 | 524 | 131 | 245 | 1100 | 148 | 80 | 29 | 53 |
| 16 | 13 | 18 | 66 | 31 | 412 | 126 | 241 | 2000 | 159 | 71 | 27 | 59 |
| 17 | 13 | 17 | 64 | 31 | 396 | 122 | 221 | 1400 | 140 | 63 | 25 | 54 |
| 18 | 14 | 25 | 62 | 31 | 436 | 112 | 213 | 1000 | 112 | 57 | 21 | 48 |
| 19 | 18 | 26 | 60 | 32 | 460 | 107 | 194 | 760 | 94 | 52 | 20 | 44 |
| 20 | 15 | 26 | 56 | 33 | 4330 | 102 | 180 | 540 | 86 | 63 | 19 | 44 |
| 21 | 14 | 25 | 52 | 32 | 5280 | 97 | 170 | 440 | 104 | 175 | 18 | 40 |
| 22 | 13 | 23 | 49 | 30 | 2130 | 97 | 160 | 350 | 139 | 132 | 17 | 37 |
| 23 | 13 | 25 | 47 | 29 | 1250 | 95 | 150 | 280 | 142 | 97 | 16 | 38 |
| 24 | 12 | 43 | 46 | 29 | 2590 | 94 | 240 | 230 | 117 | 78 | 16 | 39 |
| 25 | 20 | 246 | 46 | 28 | 1720 | 92 | 230 | 200 | 108 | 67 | 16 | 38 |
| 26 | 75 | 254 | 44 | 28 | 1080 | 89 | 200 | 170 | 108 | 61 | 16 | 35 |
| 27 | 56 | 195 | 43 | 28 | 767 | 88 | 180 | 135 | 95 | 81 | 16 | 34 |
| 28 | 50 | 189 | 43 | 27 | 588 | 86 | 170 | 123 | 82 | 88 | 15 | 35 |
| 29 | 42 | 412 | 42 | 26 | --- | 83 | 200 | 132 | 72 | 87 | 15 | 34 |
| 30 | 35 | 359 | 43 | 25 | --- | 82 | 260 | 154 | 65 | 82 | 15 | 31 |
| 31 | 31 | --- | 44 | 22 | --- | 90 | --- | 142 | --- | 71 | 14 | --- |
| TOTAL | 652 | 2191 | 2741 | 979 | 32827 | 5162 | 5783 | 19256 | 2995 | 6184 | 885 | 1338 |
| MEAN | 21.0 | 73.0 | 88.4 | 31.6 | 1172 | 167 | 193 | 621 | 99.8 | 199 | 28.5 | 44.6 |
| MAX | 75 | 412 | 264 | 43 | 5280 | 489 | 260 | 4000 | 159 | 946 | 62 | 201 |
| MIN | 12 | 17 | 42 | 22 | 21 | 82 | 92 | 110 | 57 | 52 | 14 | 16 |

CAL YR 1980 TOTAL 114419 MEAN 313 MAX 12800 MIN 10
WTR YR 1981 TOTAL 80993 MEAN 222 MAX 5280 MIN 12

## 01365000 RONDOUT CREEK NEAR LOWES CORNERS, NY

**LOCATION.**--Lat 41°52'00", long 74°29'12", Sullivan County, Hydrologic Unit 02020007, on left bank 100 ft (30 m) downstream from small tributary, 350 ft (107 m) upstream from bridge on county road, 1.1 mi (1.8 km) upstream from Sugarloaf Brook, 1.1 mi (1.8 km) east of Lowes Corners, and 1.9 mi (3.1 km) southwest of Sundown.

**DRAINAGE AREA.**--38.5 $mi^2$ (99.7 $km^2$).

**PERIOD OF RECORD.**--February 1937 to current year.

**REVISED RECORDS.**--WSP 1702: 1952.

**GAGE.**--Water-stage recorder. Datum of gage is 874.44 ft (266.529 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 4, 1938, nonrecording gage at highway bridge 350 ft (107 m) downstream at datum 847.00 ft (258.166 m) NGVD (levels by Board of Water Supply, City of New York). Oct. 4, 1938 to July 5, 1951, water-stage recorder at site 1.2 mi (1.9 km) downstream; Oct. 4, 1938 to July 3, 1949, datum 847.00 ft (258.166 m) NGVD and July 4, 1949 to July 5, 1951, datum 846.00 ft (257.861 m) NGVD (levels by Board of Water Supply, City of New York).

**REMARKS.**--Records fair.

**AVERAGE DISCHARGE.**--44 years, 98.0 $ft^3/s$ (2.775 $m^3/s$), 34.57 in/yr (878 mm/yr).

**EXTREMES FOR PERIOD OF RECORD.**--Maximum discharge observed, 7,600 $ft^3/s$ (215 $m^3/s$) July 22, 1938, from rating curve extended above 2,600 $ft^3/s$ (73.6 $m^3/s$); maximum gage height, 10.5 ft (3.200 m) Mar. 21, 1980; minimum discharge, 3.3 $ft^3/s$ (0.09 $m^3/s$) Sept. 16, 17, Oct. 17, 18, 1980.

**EXTREMES FOR CURRENT YEAR.**--Peak discharges above base of 1,200 $ft^3/s$ (34 $m^3/s$) and maximum (*):

| Date | Time | Discharge ($ft^3/s$) | Discharge ($m^3/s$) | Gage height (ft) | Gage height (m) | Date | Time | Discharge ($ft^3/s$) | Discharge ($m^3/s$) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 11 | 2115 | 1,370 | 38.8 | 4.88 | 1.487 | Feb. 24 | 0200 | 1,240 | 35.1 | 4.84 | 1.475 |
| Feb. 20 | 1500 | *4,630 | 131 | *8.14 | 2.481 | May 12 | 0445 | 2,460 | 69.7 | 5.98 | 1.823 |

Minimum discharge, 3.3 $ft^3/s$ (0.09 $m^3/s$) Oct. 17, 18; minimum gage height, 2.35 ft (0.716 m), Oct. 1.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.4 | 8.9 | 40 | 23 | 15 | 198 | 37 | 72 | 65 | 20 | 17 | 12 |
| 2 | 5.5 | 9.0 | 40 | 22 | 140 | 172 | 67 | 67 | 60 | 30 | 16 | 12 |
| 3 | 6.0 | 8.8 | 47 | 18 | 110 | 149 | 44 | 62 | 64 | 45 | 16 | 11 |
| 4 | 8.6 | 8.8 | 39 | 19 | 64 | 133 | 39 | 58 | 70 | 33 | 16 | 11 |
| 5 | 5.7 | 8.8 | 37 | 21 | 64 | 123 | 55 | 55 | 53 | 73 | 15 | 10 |
| 6 | 4.8 | 8.8 | 37 | 20 | 64 | 114 | 82 | 54 | 48 | 47 | 15 | 10 |
| 7 | 4.2 | 8.8 | 36 | 21 | 69 | 105 | 61 | 50 | 43 | 34 | 14 | 10 |
| 8 | 3.9 | 9.2 | 37 | 20 | 69 | 96 | 58 | 46 | 38 | 27 | 15 | 75 |
| 9 | 3.9 | 9.9 | 38 | 20 | 59 | 90 | 64 | 43 | 40 | 25 | 15 | 123 |
| 10 | 3.9 | 12 | 38 | 19 | 55 | 85 | 74 | 42 | 37 | 24 | 14 | 26 |
| 11 | 6.0 | 11 | 34 | 19 | 500 | 82 | 64 | 191 | 35 | 22 | 14 | 19 |
| 12 | 5.3 | 10 | 32 | 19 | 300 | 71 | 58 | 1540 | 31 | 20 | 19 | 15 |
| 13 | 4.4 | 9.9 | 33 | 20 | 150 | 64 | 55 | 594 | 33 | 20 | 14 | 14 |
| 14 | 4.1 | 9.9 | 30 | 19 | 120 | 58 | 88 | 343 | 59 | 19 | 13 | 13 |
| 15 | 3.9 | 9.9 | 27 | 19 | 110 | 49 | 92 | 328 | 75 | 18 | 13 | 15 |
| 16 | 3.9 | 9.9 | 31 | 18 | 109 | 49 | 82 | 376 | 44 | 18 | 15 | 16 |
| 17 | 3.6 | 9.6 | 29 | 18 | 109 | 41 | 84 | 244 | 36 | 16 | 13 | 15 |
| 18 | 4.2 | 11 | 28 | 17 | 110 | 37 | 82 | 194 | 32 | 16 | 12 | 15 |
| 19 | 4.9 | 11 | 29 | 17 | 130 | 37 | 71 | 165 | 29 | 16 | 11 | 15 |
| 20 | 5.4 | 10 | 23 | 17 | 1700 | 35 | 67 | 149 | 30 | 39 | 11 | 14 |
| 21 | 5.5 | 9.9 | 25 | 17 | 1290 | 33 | 64 | 134 | 32 | 46 | 11 | 13 |
| 22 | 5.5 | 10 | 25 | 17 | 671 | 33 | 58 | 122 | 42 | 24 | 11 | 14 |
| 23 | 6.0 | 10 | 26 | 17 | 446 | 33 | 78 | 116 | 38 | 20 | 11 | 15 |
| 24 | 6.5 | 37 | 26 | 17 | 733 | 33 | 94 | 109 | 30 | 19 | 11 | 14 |
| 25 | 22 | 71 | 20 | 16 | 404 | 33 | 78 | 102 | 30 | 18 | 11 | 14 |
| 26 | 43 | 45 | 24 | 16 | 310 | 31 | 67 | 95 | 29 | 19 | 10 | 13 |
| 27 | 18 | 35 | 24 | 17 | 256 | 33 | 64 | 88 | 26 | 37 | 10 | 13 |
| 28 | 13 | 40 | 23 | 17 | 225 | 31 | 61 | 85 | 24 | 23 | 9.8 | 18 |
| 29 | 11 | 51 | 26 | 16 | --- | 31 | 82 | 88 | 22 | 29 | 9.8 | 14 |
| 30 | 9.6 | 42 | 26 | 15 | --- | 35 | 85 | 81 | 21 | 21 | 10 | 13 |
| 31 | 8.9 | --- | 22 | 14 | --- | 46 | --- | 79 | --- | 18 | 11 | --- |
| TOTAL | 246.6 | 546.1 | 952 | 565 | 8382 | 2160 | 2055 | 5772 | 1216 | 836 | 403.6 | 592 |
| MEAN | 7.95 | 18.2 | 30.7 | 18.2 | 299 | 69.7 | 68.5 | 186 | 40.5 | 27.0 | 13.0 | 19.7 |
| MAX | 43 | 71 | 47 | 23 | 1700 | 198 | 94 | 1540 | 75 | 73 | 19 | 123 |
| MIN | 3.6 | 8.8 | 20 | 14 | 15 | 31 | 37 | 42 | 21 | 16 | 9.8 | 10 |
| CFSM | .21 | .47 | .80 | .47 | 7.77 | 1.81 | 1.78 | 4.83 | 1.05 | .70 | .34 | .51 |
| IN. | .24 | .53 | .92 | .55 | 8.10 | 2.09 | 1.99 | 5.58 | 1.17 | .81 | .39 | .57 |

CAL YR 1980 TOTAL 21695.5 MEAN 59.3 MAX 2020 MIN 3.6 CFSM 1.54 IN 20.96
WTR YR 1981 TOTAL 23726.3 MEAN 65.0 MAX 1700 MIN 3.6 CFSM 1.69 IN 22.92

## 01365500 CHESTNUT CREEK AT GRAHAMSVILLE, NY

LOCATION.--Lat 41°50'42", long 74°32'27", Sullivan County, Hydrologic Unit 02020007, on right bank just downstream from bridge in Grahamsville, 600 ft (183 m) downstream from Red Brook, and 0.6 mi (1.0 km) upstream from bridge on State Highway 55.

DRAINAGE AREA.--20.9 $mi^2$ (54.1 $km^2$).

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 880.96 ft (268.516 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor. Slight seasonal regulation caused by Beaverdam Pond on Red Brook.

AVERAGE DISCHARGE.--43 years, 39.1 $ft^3/s$ (1.107 $m^3/s$), 25.41 in/yr (645 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,640 $ft^3/s$ (131 $m^3/s$) Oct. 15, 1955, gage height, 5.02 ft (1.530 m), from rating curve extended above 1,300 $ft^3/s$ (36.8 $m^3/s$) on basis of slope-area measurement at gage height 4.68 ft (1.426 m); minimum, 1.4 $ft^3/s$ (0.040 $m^3/s$) Nov. 1, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 $ft^3/s$ (14 $m^3/s$) and maximum (*):

| Date | Time | Discharge ($ft^3/s$) | Discharge ($m^3/s$) | Gage height (ft) | Gage height (m) | Date | Time | Discharge ($ft^3/s$) | Discharge ($m^3/s$) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 11 | 2045 | 709 | 20.1 | 2.26 | 0.689 | May 12 | 0430 | 879 | 24.9 | 2.44 | 0.744 |
| Feb. 20 | 1600 | *1,190 | 33.7 | *2.72 | 0.829 | May 15 | 2200 | 600 | 17.0 | 2.15 | 0.655 |
| Feb. 24 | 0100 | 532 | 15.1 | 2.06 | 0.628 | | | | | | |

Minimum discharge, 3.1 $ft^3/s$ (0.09 $m^3/s$) Oct. 1, 2, 7, 8, 9, 10; minimum gage height, 0.46 ft (0.140 m) Aug. 28.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.2 | 5.5 | 17 | 8.2 | 6.6 | 66 | 19 | 41 | 20 | 8.6 | 6.3 | 4.5 |
| 2 | 3.2 | 5.5 | 16 | 8.0 | 100 | 57 | 34 | 36 | 19 | 9.7 | 5.9 | 4.5 |
| 3 | 3.5 | 5.1 | 15 | 8.0 | 56 | 46 | 21 | 30 | 21 | 9.1 | 6.3 | 4.3 |
| 4 | 4.7 | 5.1 | 13 | 8.0 | 35 | 41 | 18 | 27 | 23 | 9.1 | 7.2 | 4.2 |
| 5 | 3.5 | 5.1 | 12 | 8.0 | 23 | 39 | 23 | 24 | 19 | 43 | 6.3 | 4.2 |
| 6 | 3.3 | 4.8 | 12 | 7.8 | 21 | 36 | 27 | 23 | 17 | 20 | 5.9 | 4.1 |
| 7 | 3.3 | 4.8 | 13 | 7.8 | 19 | 34 | 21 | 23 | 15 | 13 | 5.5 | 4.5 |
| 8 | 3.3 | 5.1 | 14 | 7.8 | 18 | 31 | 20 | 21 | 14 | 10 | 6.3 | 29 |
| 9 | 3.3 | 6.3 | 14 | 7.8 | 17 | 31 | 23 | 19 | 15 | 9.1 | 5.9 | 21 |
| 10 | 3.3 | 6.7 | 15 | 7.8 | 16 | 30 | 26 | 17 | 14 | 8.6 | 5.1 | 8.6 |
| 11 | 4.5 | 5.5 | 13 | 7.8 | 265 | 30 | 21 | 118 | 13 | 7.6 | 5.5 | 6.8 |
| 12 | 3.8 | 5.1 | 12 | 7.8 | 239 | 26 | 20 | 665 | 12 | 7.2 | 6.3 | 6.3 |
| 13 | 3.6 | 5.1 | 11 | 7.8 | 131 | 26 | 19 | 264 | 12 | 7.2 | 5.1 | 6.0 |
| 14 | 3.6 | 5.3 | 10 | 7.6 | 80 | 22 | 56 | 150 | 24 | 6.7 | 5.1 | 5.4 |
| 15 | 3.6 | 5.9 | 10 | 7.6 | 55 | 22 | 51 | 185 | 26 | 6.3 | 4.8 | 5.1 |
| 16 | 3.6 | 5.9 | 9.8 | 7.6 | 46 | 21 | 34 | 298 | 18 | 6.3 | 5.9 | 5.9 |
| 17 | 3.6 | 5.5 | 9.8 | 7.4 | 71 | 17 | 34 | 153 | 13 | 6.3 | 4.8 | 6.1 |
| 18 | 4.0 | 6.3 | 9.8 | 7.4 | 124 | 15 | 34 | 105 | 11 | 6.3 | 4.5 | 5.5 |
| 19 | 4.0 | 6.7 | 9.6 | 7.4 | 167 | 15 | 26 | 80 | 11 | 5.9 | 4.5 | 6.0 |
| 20 | 3.6 | 6.7 | 9.4 | 7.2 | 687 | 15 | 24 | 66 | 11 | 20 | 4.2 | 5.5 |
| 21 | 3.6 | 6.3 | 9.4 | 7.2 | 386 | 15 | 22 | 57 | 13 | 15 | 3.9 | 5.1 |
| 22 | 3.6 | 7.2 | 9.4 | 7.2 | 188 | 15 | 22 | 46 | 20 | 10 | 4.2 | 5.2 |
| 23 | 3.6 | 7.2 | 9.2 | 7.2 | 158 | 15 | 34 | 39 | 16 | 8.1 | 4.2 | 5.9 |
| 24 | 3.6 | 63 | 9.2 | 7.2 | 283 | 16 | 55 | 34 | 13 | 7.2 | 4.2 | 5.5 |
| 25 | 28 | 55 | 9.2 | 7.0 | 157 | 16 | 41 | 30 | 13 | 7.2 | 4.2 | 4.8 |
| 26 | 22 | 28 | 9.0 | 7.0 | 111 | 15 | 31 | 26 | 12 | 7.2 | 3.9 | 4.5 |
| 27 | 9.7 | 22 | 8.8 | 7.0 | 88 | 14 | 26 | 23 | 11 | 10 | 3.9 | 4.8 |
| 28 | 8.1 | 26 | 8.6 | 6.8 | 75 | 14 | 27 | 23 | 9.7 | 7.2 | 3.6 | 6.9 |
| 29 | 7.2 | 28 | 8.6 | 6.6 | --- | 14 | 53 | 28 | 9.1 | 8.6 | 3.9 | 5.1 |
| 30 | 6.7 | 21 | 8.6 | 6.6 | --- | 15 | 60 | 23 | 8.6 | 7.2 | 4.2 | 4.8 |
| 31 | 5.9 | --- | 8.4 | 6.6 | --- | 18 | --- | 24 | --- | 6.7 | 4.8 | --- |
| TOTAL | 174.5 | 375.7 | 343.8 | 231.2 | 3622.6 | 787 | 922 | 2698 | 453.4 | 314.4 | 156.4 | 200.1 |
| MEAN | 5.63 | 12.5 | 11.1 | 7.46 | 129 | 25.4 | 30.7 | 87.0 | 15.1 | 10.1 | 5.05 | 6.67 |
| MAX | 28 | 63 | 17 | 8.2 | 687 | 66 | 60 | 665 | 26 | 43 | 7.2 | 29 |
| MIN | 3.2 | 4.8 | 8.4 | 6.6 | 6.6 | 14 | 18 | 17 | 8.6 | 5.9 | 3.6 | 4.1 |
| CFSM | .27 | .60 | .53 | .36 | 6.17 | 1.22 | 1.47 | 4.16 | .72 | .48 | .24 | .32 |
| IN. | .31 | .67 | .61 | .41 | 6.45 | 1.40 | 1.64 | 4.80 | .81 | .56 | .28 | .36 |

CAL YR 1980 TOTAL 9905.6 MEAN 27.1 MAX 771 MIN 2.9 CFSM 1.30 IN 17.63
WTR YR 1981 TOTAL 10279.1 MEAN 28.2 MAX 687 MIN 3.2 CFSM 1.35 IN 18.29

## 01367500 RONDOUT CREEK AT ROSENDALE, NY

LOCATION.--Lat 41°50'35", long 74°05'11", Ulster County, Hydrologic Unit 02020007, on left bank 30 ft (9 m) upstream from bridge on James Street in Rosendale, and 3 mi (5 km) upstream from Wallkill River.

DRAINAGE AREA.--386 $mi^2$ (1,000 $km^2$) (see REMARKS below).

PERIOD OF RECORD.--July 1901 to November 1903, October 1905 to January 1919, August 1926 to current year. Monthly discharge only for some periods, published in WSP 1302, and WRD NY 1970.

REVISED RECORDS.--WSP 641: Drainage Area. WSP 756: 1933.

GAGE.--Water-stage recorder. Datum of gage is 32.83 ft (10.007 m) National Geodetic Vertical Datum of 1929. Prior to January 1919, nonrecording gage at site 150 ft (46 m) downstream at datum 38.83 ft (11.835 m) NGVD. Aug. 3, 1926 to Sept. 10, 1969, at present site at datum 42.83 ft (13.055 m) NGVD. Sept. 11, 1969 to Feb. 3, 1970, water-stage recorder, and June 9, 1970 to Jan. 18, 1971, nonrecording gage at site 0.2 mi (0.3 km) upstream at datum 44.03 ft (13.420 m) NGVD.

REMARKS.--Records good except those for winter periods, which are poor. Occasional regulation from hydroelectric plant upstream from station. Diversion from Rondout Creek through the emergency connection to the Delaware Aqueduct at Lackawack for New York City water supply during period April 1944 to May 1951. Since October 1950, flow regulated by Rondout Reservoir (see Reservoirs in Hudson River Basin). Subsequent to May 1951, entire flow except for period of spilling, diverted from Rondout Reservoir for New York City water supply. Discharge records for this station now represent the natural flow from 272 $mi^2$ (704 $km^2$), together with spillage during high flow from Rondout Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35,800 $ft^3/s$ (1,010 $m^3/s$) Oct. 16, 1955, gage height, 36.8 ft (11.22 m), datum then in use, from floodmarks, from rating curve extended above 15,000 $ft^3/s$ (425 $m^3/s$) on basis of contracted-opening measurement at gage height 33.93 ft (10.342 m); minimum, 2.2 $ft^3/s$ (0.062 $m^3/s$) July 16, 1965; minimum daily, 3.0 $ft^3/s$ (0.085 $m^3/s$) July 16, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,100 $ft^3/s$ (371 $m^3/s$) Feb. 20, gage height, 18.11 ft (5.520 m); minimum, 23 $ft^3/s$ (0.65 $m^3/s$) Aug. 29, 30, gage height, 8.64 ft (2.633 m).

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 31 | 80 | 362 | 92 | 54 | 871 | 193 | 475 | 206 | 117 | 71 | 36 |
| 2 | 31 | 72 | 300 | 88 | 2350 | 706 | 381 | 458 | 174 | 135 | 64 | 32 |
| 3 | 34 | 66 | 276 | 86 | 2830 | 614 | 376 | 436 | 174 | 177 | 57 | 31 |
| 4 | 40 | 60 | 268 | 82 | 1310 | 523 | 309 | 381 | 206 | 196 | 56 | 30 |
| 5 | 44 | 56 | 213 | 78 | 1040 | 493 | 264 | 313 | 203 | 464 | 47 | 29 |
| 6 | 38 | 52 | 220 | 76 | 713 | 458 | 326 | 292 | 168 | 481 | 47 | 29 |
| 7 | 34 | 49 | 213 | 76 | 736 | 436 | 317 | 284 | 148 | 321 | 45 | 28 |
| 8 | 32 | 49 | 193 | 84 | 706 | 410 | 292 | 256 | 135 | 241 | 42 | 32 |
| 9 | 30 | 49 | 213 | 84 | 662 | 386 | 245 | 238 | 132 | 193 | 45 | 203 |
| 10 | 28 | 57 | 220 | 82 | 481 | 367 | 335 | 227 | 129 | 162 | 48 | 174 |
| 11 | 31 | 64 | 193 | 80 | 2550 | 348 | 313 | 321 | 117 | 140 | 48 | 92 |
| 12 | 32 | 60 | 151 | 80 | 4510 | 330 | 296 | 6980 | 103 | 119 | 48 | 82 |
| 13 | 33 | 67 | 140 | 78 | 1900 | 296 | 272 | 4180 | 105 | 108 | 49 | 74 |
| 14 | 29 | 67 | 130 | 76 | 1320 | 272 | 330 | 2060 | 135 | 101 | 46 | 69 |
| 15 | 29 | 65 | 130 | 74 | 914 | 245 | 798 | 1390 | 241 | 90 | 42 | 54 |
| 16 | 28 | 57 | 120 | 74 | 743 | 245 | 580 | 2470 | 292 | 82 | 45 | 49 |
| 17 | 29 | 54 | 120 | 76 | 634 | 234 | 469 | 1820 | 223 | 74 | 41 | 54 |
| 18 | 28 | 71 | 120 | 76 | 774 | 206 | 405 | 1230 | 168 | 71 | 40 | 56 |
| 19 | 28 | 71 | 110 | 78 | 958 | 203 | 367 | 914 | 135 | 65 | 37 | 52 |
| 20 | 27 | 67 | 100 | 80 | 5940 | 196 | 335 | 627 | 124 | 78 | 36 | 48 |
| 21 | 28 | 65 | 100 | 76 | 8390 | 187 | 304 | 517 | 140 | 171 | 35 | 45 |
| 22 | 27 | 65 | 98 | 74 | 3550 | 193 | 284 | 441 | 231 | 168 | 32 | 45 |
| 23 | 27 | 71 | 94 | 72 | 2320 | 187 | 272 | 381 | 339 | 115 | 31 | 60 |
| 24 | 26 | 110 | 92 | 70 | 4840 | 187 | 430 | 330 | 264 | 94 | 30 | 71 |
| 25 | 47 | 880 | 92 | 68 | 2860 | 184 | 430 | 292 | 216 | 82 | 29 | 80 |
| 26 | 435 | 529 | 90 | 66 | 1990 | 177 | 376 | 264 | 213 | 78 | 28 | 73 |
| 27 | 231 | 335 | 88 | 64 | 1490 | 171 | 339 | 249 | 187 | 78 | 26 | 54 |
| 28 | 148 | 339 | 86 | 62 | 1040 | 168 | 321 | 241 | 165 | 80 | 25 | 49 |
| 29 | 122 | 698 | 86 | 60 | --- | 162 | 376 | 253 | 140 | 88 | 24 | 47 |
| 30 | 108 | 475 | 90 | 58 | --- | 162 | 567 | 276 | 127 | 96 | 26 | 45 |
| 31 | 92 | --- | 94 | 56 | --- | 184 | --- | 238 | --- | 84 | 30 | --- |
| TOTAL | 1927 | 4800 | 4802 | 2326 | 57605 | 9801 | 10902 | 28834 | 5340 | 4549 | 1270 | 1823 |
| MEAN | 62.2 | 160 | 155 | 75.0 | 2057 | 316 | 363 | 930 | 178 | 147 | 41.0 | 60.8 |
| MAX | 435 | 880 | 362 | 92 | 8390 | 871 | 798 | 6980 | 339 | 481 | 71 | 203 |
| MIN | 26 | 49 | 86 | 56 | 54 | 162 | 193 | 227 | 103 | 65 | 24 | 28 |

CAL YR 1980 TOTAL 141928 MEAN 388 MAX 19100 MIN 22
WTR YR 1981 TOTAL 133979 MEAN 367 MAX 8390 MIN 24

## 01368000 WALLKILL RIVER NEAR UNIONVILLE, NY

LOCATION.--Lat 41°15'36", long 74°32'56", Sussex County, New Jersey, Hydrologic Unit 02020007, on right bank on downstream side of bridge on the Bassetts Bridge Road, 0.6 mi (1.0 km) upstream from small tributary, 2.0 mi (3.2 km) south of the New York-New Jersey State line, and 3.0 mi (4.8 km) south of Unionville.

DRAINAGE AREA.--140 mi$^2$ (363 km$^2$).

PERIOD OF RECORD.--September 1937 to September 1981 (discontinued).

REVISED RECORDS.--WSP 2102: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 379.28 ft (115.605 m) National Vertical Geodetic Datum of 1929 (levels by Corps of Engineers). Prior to Nov. 16, 1949, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for winter periods, which are poor, and periods of recession above 600 ft$^3$/s (17 m$^3$/s), which may be as much as 35 percent in error. Water diverted from Morris Lake, upstream from station, by the Newton Water and Sewer Authority for municipal use in New Jersey. After use, the water is released into Paulins Kill (Delaware River basin). Diversion records available from the Delaware River Basin Commission.

AVERAGE DISCHARGE.--44 years, 215 ft$^3$/s (6.089 m$^3$/s), 20.86 in/yr (530 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,880 ft$^3$/s (195 m$^3$/s) Aug. 19, 1955, gage height, 13.35 ft (4.069 m); minimum daily, 4.2 ft$^3$/s (0.12 m$^3$/s) Aug. 8-10, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,200 ft$^3$/s (34.0 m$^3$/s):

| Date | Time | Discharge | | Gage height | |
|---|---|---|---|---|---|
| | | (ft$^3$/s) | (m$^3$/s) | (ft) | (m) |
| May 13 | 2230 | 1,430 | 40.5 | 8.20 | 2.499 |

Minimum daily discharge, 11 ft$^3$/s (0.31 m$^3$/s) Aug. 25, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16 | 47 | 155 | 37 | 27 | 337 | 115 | 267 | 119 | 37 | 24 | 14 |
| 2 | 16 | 41 | 130 | 36 | 200 | 295 | 242 | 263 | 128 | 64 | 22 | 14 |
| 3 | 18 | 37 | 119 | 35 | 428 | 259 | 227 | 314 | 193 | 103 | 21 | 14 |
| 4 | 35 | 35 | 93 | 34 | 413 | 223 | 173 | 251 | 204 | 77 | 21 | 14 |
| 5 | 37 | 39 | 75 | 32 | 240 | 218 | 146 | 213 | 213 | 214 | 20 | 14 |
| 6 | 25 | 38 | 74 | 31 | 220 | 214 | 192 | 195 | 173 | 259 | 19 | 13 |
| 7 | 20 | 34 | 70 | 29 | 190 | 213 | 180 | 183 | 128 | 193 | 18 | 14 |
| 8 | 18 | 34 | 75 | 29 | 180 | 209 | 146 | 161 | 103 | 127 | 20 | 14 |
| 9 | 17 | 35 | 93 | 28 | 170 | 211 | 132 | 144 | 91 | 86 | 31 | 39 |
| 10 | 16 | 52 | 101 | 28 | 160 | 200 | 164 | 134 | 99 | 64 | 29 | 42 |
| 11 | 17 | 56 | 97 | 28 | 350 | 187 | 151 | 173 | 87 | 54 | 22 | 25 |
| 12 | 19 | 44 | 70 | 28 | 606 | 178 | 149 | 733 | 75 | 45 | 20 | 21 |
| 13 | 19 | 37 | 60 | 28 | 706 | 168 | 151 | 1300 | 66 | 40 | 25 | 19 |
| 14 | 17 | 33 | 54 | 28 | 424 | 159 | 168 | 1380 | 69 | 37 | 21 | 17 |
| 15 | 16 | 32 | 48 | 28 | 255 | 138 | 265 | 1000 | 115 | 33 | 20 | 18 |
| 16 | 16 | 31 | 47 | 28 | 214 | 138 | 214 | 820 | 108 | 29 | 20 | 28 |
| 17 | 16 | 29 | 44 | 28 | 214 | 125 | 183 | 1000 | 82 | 26 | 21 | 47 |
| 18 | 18 | 41 | 42 | 28 | 218 | 107 | 188 | 700 | 64 | 25 | 18 | 35 |
| 19 | 26 | 64 | 40 | 28 | 222 | 107 | 183 | 810 | 54 | 24 | 16 | 28 |
| 20 | 28 | 63 | 38 | 28 | 344 | 99 | 159 | 509 | 49 | 31 | 14 | 24 |
| 21 | 23 | 59 | 36 | 28 | 680 | 101 | 140 | 375 | 49 | 117 | 14 | 21 |
| 22 | 20 | 57 | 35 | 28 | 897 | 101 | 125 | 312 | 63 | 161 | 13 | 20 |
| 23 | 18 | 70 | 34 | 28 | 929 | 103 | 127 | 265 | 105 | 110 | 12 | 21 |
| 24 | 17 | 99 | 32 | 28 | 740 | 105 | 234 | 233 | 82 | 63 | 12 | 20 |
| 25 | 63 | 373 | 31 | 26 | 620 | 99 | 240 | 202 | 60 | 44 | 11 | 18 |
| 26 | 333 | 375 | 30 | 25 | 520 | 99 | 190 | 180 | 64 | 39 | 11 | 16 |
| 27 | 288 | 233 | 29 | 24 | 460 | 95 | 159 | 164 | 66 | 38 | 12 | 15 |
| 28 | 159 | 192 | 29 | 23 | 396 | 91 | 144 | 146 | 52 | 35 | 12 | 16 |
| 29 | 97 | 220 | 32 | 22 | --- | 86 | 197 | 155 | 44 | 33 | 12 | 16 |
| 30 | 70 | 190 | 38 | 22 | --- | 84 | 310 | 175 | 40 | 31 | 13 | 15 |
| 31 | 56 | --- | 38 | 21 | --- | 117 | --- | 146 | --- | 27 | 14 | --- |
| TOTAL | 1554 | 2690 | 1889 | 874 | 11023 | 4866 | 5394 | 12903 | 2845 | 2266 | 558 | 632 |
| MEAN | 50.1 | 89.7 | 60.9 | 28.2 | 394 | 157 | 180 | 416 | 94.8 | 73.1 | 18.0 | 21.1 |
| MAX | 333 | 375 | 155 | 37 | 929 | 337 | 310 | 1380 | 213 | 259 | 31 | 47 |
| MIN | 16 | 29 | 29 | 21 | 27 | 84 | 115 | 134 | 40 | 24 | 11 | 13 |
| CFSM | .36 | .64 | .44 | .20 | 2.81 | 1.12 | 1.29 | 2.97 | .68 | .52 | .13 | .15 |
| IN. | .41 | .71 | .50 | .23 | 2.93 | 1.29 | 1.43 | 3.43 | .76 | .60 | .15 | .17 |

CAL YR 1980 TOTAL 53583 MEAN 146 MAX 1340 MIN 13 CFSM 1.04 IN 14.24
WTR YR 1981 TOTAL 47494 MEAN 130 MAX 1380 MIN 11 CFSM .93 IN 12.62

## 01371500 WALLKILL RIVER AT GARDINER, NY

LOCATION.--Lat 41°41'10", long 74°09'56", Ulster County, Hydrologic Unit 02020007, on left bank 400 ft (122 m) upstream from bridge on U.S. Highway 44, 500 ft (152 m) downstream from Shawangunk Kill, and 0.7 mi (1.1 km) northwest of Gardiner.

DRAINAGE AREA.--711 mi$^2$ (1,841 km$^2$).

PERIOD OF RECORD.--September 1924 to current year.

REVISED RECORDS.--WSP 756: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 185.70 ft (56.601 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--57 years, 1,051 ft$^3$/s (29.76 m$^3$/s), 20.07 in/yr (510 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,800 ft$^3$/s (872 m$^3$/s) Oct. 16, 1955, gage height, 19.81 ft (6.038 m); minimum, 9.5 ft$^3$/s (0.27 m$^3$/s) Sept. 28, 1964; minimum gage height, 1.59 ft (0.48 m) Aug. 14, 15, 16, 19, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 6,400 ft$^3$/s (181 m$^3$/s) and maximum (*):

| Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) | Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 2 | 2130 | ice jam | | 8.25 | 2.515 | Feb. 21 | 0200 | 7,230 | 205 | 8.78 | 2.676 |
| Feb. 12 | 0700 | ice jam | | *a12.66 | 3.859 | May 12 | 2000 | *9,360 | 265 | 10.09 | 3.075 |

a Ice jam.

Minimum discharge, 18 ft$^3$/s (0.51 m$^3$/s), Aug. 26, gage height, 1.71 ft (0.521 m).

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 67 | 183 | 786 | 180 | 110 | 1770 | 402 | 1380 | 469 | 171 | 87 | 37 |
| 2 | 67 | 166 | 647 | 180 | 500 | 1500 | 794 | 1210 | 402 | 168 | 76 | 38 |
| 3 | 78 | 147 | 567 | 170 | 3000 | 1310 | 965 | 1270 | 413 | 239 | 70 | 46 |
| 4 | 105 | 135 | 440 | 170 | 2200 | 1090 | 778 | 1110 | 580 | 299 | 66 | 44 |
| 5 | 116 | 130 | 350 | 160 | 1800 | 982 | 640 | 898 | 633 | 392 | 62 | 40 |
| 6 | 111 | 125 | 340 | 150 | 1500 | 940 | 668 | 771 | 587 | 554 | 58 | 40 |
| 7 | 109 | 125 | 330 | 150 | 1300 | 906 | 704 | 697 | 475 | 554 | 53 | 40 |
| 8 | 94 | 123 | 322 | 150 | 1100 | 873 | 620 | 620 | 381 | 408 | 53 | 44 |
| 9 | 86 | 125 | 327 | 160 | 1100 | 849 | 542 | 548 | 327 | 299 | 55 | 107 |
| 10 | 80 | 132 | 381 | 160 | 1000 | 825 | 567 | 493 | 299 | 227 | 62 | 141 |
| 11 | 84 | 155 | 402 | 160 | 2500 | 763 | 613 | 682 | 294 | 183 | 66 | 109 |
| 12 | 86 | 152 | 366 | 150 | 5000 | 704 | 587 | 6550 | 268 | 158 | 72 | 109 |
| 13 | 86 | 142 | 336 | 150 | 3500 | 661 | 567 | 6110 | 268 | 145 | 68 | 94 |
| 14 | 84 | 128 | 270 | 150 | 2700 | 620 | 741 | 4480 | 285 | 132 | 62 | 82 |
| 15 | 80 | 118 | 240 | 150 | 2000 | 567 | 1410 | 3850 | 376 | 120 | 64 | 80 |
| 16 | 80 | 111 | 230 | 150 | 1500 | 520 | 1130 | 4570 | 408 | 107 | 66 | 84 |
| 17 | 80 | 109 | 220 | 150 | 1300 | 480 | 898 | 4270 | 351 | 100 | 58 | 82 |
| 18 | 80 | 130 | 220 | 150 | 1200 | 450 | 817 | 3460 | 281 | 95 | 53 | 96 |
| 19 | 82 | 135 | 210 | 160 | 1200 | 420 | 741 | 2810 | 235 | 92 | 49 | 116 |
| 20 | 86 | 163 | 210 | 160 | 3000 | 400 | 661 | 2250 | 212 | 104 | 76 | 107 |
| 21 | 90 | 177 | 200 | 160 | 5820 | 390 | 587 | 1630 | 303 | 152 | 72 | 94 |
| 22 | 94 | 179 | 190 | 150 | 4310 | 390 | 523 | 1270 | 718 | 215 | 48 | 94 |
| 23 | 90 | 190 | 190 | 150 | 3780 | 387 | 517 | 1050 | 778 | 264 | 34 | 92 |
| 24 | 84 | 272 | 180 | 140 | 5190 | 392 | 794 | 881 | 529 | 208 | 25 | 86 |
| 25 | 116 | 1580 | 180 | 140 | 4250 | 397 | 1020 | 741 | 392 | 156 | 22 | 80 |
| 26 | 756 | 1740 | 170 | 140 | 3460 | 381 | 865 | 647 | 381 | 129 | 19 | 76 |
| 27 | 957 | 1200 | 170 | 130 | 2780 | 371 | 697 | 574 | 312 | 118 | 20 | 74 |
| 28 | 633 | 906 | 170 | 130 | 2160 | 361 | 613 | 523 | 268 | 112 | 25 | 74 |
| 29 | 413 | 1130 | 170 | 120 | --- | 351 | 756 | 505 | 223 | 118 | 31 | 70 |
| 30 | 281 | 1010 | 180 | 120 | --- | 341 | 1560 | 554 | 190 | 105 | 34 | 65 |
| 31 | 219 | --- | 190 | 110 | --- | 351 | --- | 561 | --- | 97 | 35 | --- |
| TOTAL | 5474 | 11118 | 9184 | 4650 | 69260 | 20742 | 22777 | 56965 | 11638 | 6221 | 1641 | 2341 |
| MEAN | 177 | 371 | 296 | 150 | 2474 | 669 | 759 | 1838 | 388 | 201 | 52.9 | 78.0 |
| MAX | 957 | 1740 | 786 | 180 | 5820 | 1770 | 1560 | 6550 | 778 | 554 | 87 | 141 |
| MIN | 67 | 109 | 170 | 110 | 110 | 341 | 402 | 493 | 190 | 92 | 19 | 37 |

CAL YR 1980 TOTAL 262728 MEAN 718 MAX 13000 MIN 45
WTR YR 1981 TOTAL 222011 MEAN 608 MAX 6550 MIN 19

## 01372500 WAPPINGER CREEK NEAR WAPPINGERS FALLS, NY

LOCATION.--Lat 41°39'11", long 73°52'23", Dutchess County, Hydrologic Unit 02020008, on left bank 700 ft (213 m) downstream from Red Oak Mill dam, and 4.5 mi (7.2 km) northeast of village of Wappingers Falls.

DRAINAGE AREA.--181 mi$^2$ (469 km$^2$).

PERIOD OF RECORD.--May 1903 to June 1905 (gage heights only during some winter months), August 1928 to current year.

REVISED RECORDS.--WSP 741: 1932. WSP 1902: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 114.37 ft (34.860 m) National Geodetic Vertical Datum of 1929, (levels by Corps of Engineers). May 1903 to June 1905 staff gage at site 2.5 mi (4.0 km) downstream at different datum. Aug. 7, 1928 to Sept. 25, 1931, water-stage recorder at site 2 mi (3 km) downstream at different datum.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--53 years (1929-81), 252 ft$^3$/s (7.137 m$^3$/s), 18.91 in/yr (480 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,600 ft$^3$/s (527 m$^3$/s) Aug. 19, 1955, gage height, 19.60 ft (5.974 m), from floodmarks in gage shelter, from rating curve extended above 5,000 ft$^3$/s (140 m$^3$/s) on basis of flow-over-dam and contracted-opening measurement at gage height 18.02 ft (5.492 m) and contracted-opening and flow-over-road measurement at gage height 19.60 ft (5.974 m); minimum, 0.90 ft$^3$/s (0.025 m$^3$/s) Sept. 20, 21, 1964, gage height, 2.05 ft (0.625 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft$^3$/s (42 m$^3$/s).

| Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|
| May 12 | 1715 | 1,830 | 51.8 | 6.35 | 1.935 |

Minimum discharge, 9.9 ft$^3$/s (0.280 m$^3$/s) Oct. 1, gage height, 2.39 ft (0.728 m).

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 10 | 18 | 143 | 28 | 20 | 528 | 117 | 343 | 157 | 75 | 46 | 13 |
| 2 | 11 | 17 | 123 | 27 | 60 | 465 | 252 | 288 | 141 | 187 | 41 | 13 |
| 3 | 15 | 17 | 111 | 27 | 350 | 417 | 239 | 256 | 141 | 278 | 37 | 13 |
| 4 | 27 | 16 | 97 | 27 | 230 | 351 | 190 | 226 | 180 | 281 | 35 | 12 |
| 5 | 29 | 17 | 74 | 26 | 170 | 330 | 174 | 207 | 159 | 464 | 33 | 12 |
| 6 | 22 | 17 | 70 | 26 | 130 | 311 | 249 | 199 | 137 | 632 | 31 | 12 |
| 7 | 17 | 17 | 68 | 26 | 110 | 288 | 232 | 201 | 123 | 431 | 29 | 12 |
| 8 | 16 | 17 | 66 | 26 | 100 | 288 | 201 | 180 | 108 | 300 | 28 | 15 |
| 9 | 14 | 18 | 72 | 26 | 90 | 270 | 185 | 164 | 100 | 226 | 28 | 30 |
| 10 | 14 | 22 | 80 | 25 | 86 | 249 | 210 | 154 | 97 | 187 | 26 | 26 |
| 11 | 17 | 23 | 79 | 25 | 160 | 232 | 196 | 172 | 95 | 154 | 25 | 20 |
| 12 | 19 | 22 | 65 | 25 | 700 | 216 | 182 | 1340 | 83 | 131 | 24 | 17 |
| 13 | 22 | 19 | 65 | 25 | 400 | 201 | 167 | 1490 | 100 | 115 | 27 | 16 |
| 14 | 20 | 19 | 60 | 24 | 280 | 193 | 180 | 1070 | 117 | 106 | 25 | 15 |
| 15 | 17 | 18 | 43 | 24 | 230 | 177 | 307 | 818 | 138 | 94 | 24 | 19 |
| 16 | 17 | 18 | 61 | 24 | 210 | 172 | 252 | 877 | 148 | 85 | 24 | 24 |
| 17 | 16 | 18 | 52 | 24 | 200 | 162 | 222 | 818 | 137 | 78 | 21 | 25 |
| 18 | 17 | 22 | 45 | 24 | 190 | 145 | 219 | 639 | 105 | 73 | 19 | 24 |
| 19 | 18 | 28 | 42 | 24 | 190 | 141 | 199 | 523 | 88 | 69 | 18 | 21 |
| 20 | 18 | 24 | 39 | 23 | 507 | 135 | 185 | 455 | 82 | 73 | 17 | 20 |
| 21 | 17 | 24 | 37 | 23 | 1250 | 127 | 174 | 394 | 100 | 111 | 16 | 18 |
| 22 | 18 | 24 | 34 | 23 | 928 | 127 | 164 | 347 | 115 | 115 | 16 | 16 |
| 23 | 17 | 26 | 33 | 23 | 702 | 127 | 169 | 307 | 191 | 92 | 15 | 19 |
| 24 | 17 | 37 | 33 | 22 | 859 | 125 | 239 | 270 | 150 | 75 | 14 | 27 |
| 25 | 21 | 154 | 32 | 22 | 846 | 123 | 256 | 239 | 128 | 66 | 15 | 23 |
| 26 | 58 | 159 | 31 | 21 | 762 | 119 | 213 | 210 | 160 | 61 | 15 | 19 |
| 27 | 57 | 117 | 30 | 21 | 715 | 119 | 188 | 193 | 130 | 57 | 15 | 18 |
| 28 | 39 | 123 | 30 | 21 | 590 | 117 | 174 | 188 | 107 | 52 | 15 | 16 |
| 29 | 29 | 213 | 29 | 21 | --- | 113 | 207 | 199 | 92 | 57 | 14 | 14 |
| 30 | 24 | 182 | 29 | 21 | --- | 111 | 381 | 204 | 82 | 62 | 14 | 13 |
| 31 | 19 | --- | 28 | 20 | --- | 121 | --- | 180 | --- | 52 | 14 | --- |
| TOTAL | 672 | 1446 | 1801 | 744 | 11065 | 6600 | 6323 | 13151 | 3691 | 4839 | 721 | 542 |
| MEAN | 21.7 | 48.2 | 58.1 | 24.0 | 395 | 213 | 211 | 424 | 123 | 156 | 23.3 | 18.1 |
| MAX | 58 | 213 | 143 | 28 | 1250 | 528 | 381 | 1490 | 191 | 632 | 46 | 30 |
| MIN | 10 | 16 | 28 | 20 | 20 | 111 | 117 | 154 | 82 | 52 | 14 | 12 |
| CFSM | .12 | .27 | .32 | .13 | 2.18 | 1.18 | 1.17 | 2.34 | .68 | .86 | .13 | .10 |
| IN. | .14 | .30 | .37 | .15 | 2.27 | 1.36 | 1.30 | 2.70 | .76 | .99 | .15 | .11 |

CAL YR 1980 TOTAL 59990.8 MEAN 164 MAX 2930 MIN 8.7 CFSM .91 IN 12.33
WTR YR 1981 TOTAL 51595.0 MEAN 141 MAX 1490 MIN 10 CFSM .78 IN 10.60

## 01375000 CROTON RIVER AT NEW CROTON DAM, NEAR CROTON-ON-HUDSON, NY

LOCATION.--Lat 41°13'32", long 73°51'32", Westchester County, Hydrologic Unit 02030101, on left bank 1,000 ft (305 m) downstream from New Croton Dam, and 1.8 mi (2.9 km) northeast of Croton-On-Hudson.

DRAINAGE AREA.--378 mi$^2$ (979 km$^2$).

PERIOD OF RECORD.--August 1933 to current year. Prior to Oct. 1, 1941, published as "at Quaker Bridge," (low-flow records at this site are not equivalent owing to well pumpage upstream). Fragmentary records published during August 1933 to September 1941 for "at Cornell Dam near Croton" and "at New Croton near Croton" are equivalent. Oct. 1, 1941 to Sept. 30, 1955 published as "at New Croton Dam near Croton".

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 50 ft (15 m), from topographic map. Prior to Oct. 1, 1941, supplementary water-stage recorder and concrete control at site 1.1 mi (1.8 km) downstream at Quaker Bridge.

REMARKS.--Records poor. Entire flow, except for periods of spilling and releases to augment Croton-on-Hudson water supply, diverted from New Croton Reservoir for municipal supply of City of New York.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 45,400 ft$^3$/s (1,290 m$^3$/s) Oct. 16, 1955, gage height, 18.44 ft (5.621 m), from floodmarks, from rating curve extended above 9,700 ft$^3$/s (275 m$^3$/s) on basis of slope-area measurements of peak flow; minimum daily, 0.1 ft$^3$/s (0.003 m$^3$/s) Mar. 14, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11 ft$^3$/s (0.31 m$^3$/s) Oct. 25, gage height, 1.25 ft (0.381 m); minimum daily, 0.28 ft$^3$/s (0.008 m$^3$/s) Aug. 25, 26; minimum gage height, 0.29 ft (0.088 m) May 7, 8, 9, 10, 11.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 7.5 | 7.9 | 7.5 | 7.0 | .54 | 3.4 | 2.1 | 1.1 | 1.2 | .94 | .34 | .44 |
| 2 | 7.5 | 7.9 | 7.5 | 7.0 | .54 | 3.1 | 1.8 | 1.2 | 2.4 | .94 | .34 | .44 |
| 3 | 7.5 | 7.7 | 7.5 | 7.0 | 4.5 | 2.9 | 1.8 | .84 | 2.6 | 1.1 | .34 | .44 |
| 4 | 7.5 | 7.7 | 7.5 | 7.0 | 2.5 | 2.6 | 2.2 | .84 | 2.9 | 1.2 | .34 | .44 |
| 5 | 7.5 | 7.7 | 7.5 | 7.0 | 1.0 | 2.5 | 2.4 | .80 | 1.9 | 1.2 | .37 | .44 |
| 6 | 7.5 | 7.7 | 7.5 | 7.0 | .80 | 2.3 | 2.0 | .80 | 1.6 | 1.0 | .37 | .41 |
| 7 | 7.3 | 7.7 | 7.5 | 7.0 | .66 | 1.4 | 1.9 | .78 | 1.2 | .98 | .37 | .47 |
| 8 | 7.3 | 7.7 | 7.5 | 7.0 | .56 | 1.1 | 2.0 | .78 | .88 | .90 | .41 | .77 |
| 9 | 7.3 | 7.7 | 7.5 | 7.0 | .54 | 1.1 | 1.9 | .74 | .88 | .90 | .37 | .73 |
| 10 | 7.5 | 7.5 | 7.7 | 7.0 | .52 | 1.1 | 1.8 | .74 | .84 | .86 | .37 | .41 |
| 11 | 7.7 | 7.7 | 7.5 | 7.0 | .50 | 1.1 | 1.7 | 1.8 | .80 | .84 | .41 | .41 |
| 12 | 7.7 | 7.9 | 7.5 | 7.0 | 5.0 | .93 | 1.7 | 4.1 | .84 | .80 | .41 | .44 |
| 13 | 7.7 | 7.9 | 7.5 | 7.0 | 2.7 | .93 | 2.6 | 2.8 | .84 | .80 | .37 | .44 |
| 14 | 7.7 | 7.7 | 7.5 | 7.0 | 1.5 | .89 | 2.3 | 1.9 | .88 | .80 | .37 | .53 |
| 15 | 7.7 | 7.5 | 7.5 | 7.0 | 1.0 | .85 | 2.0 | 1.9 | .88 | .78 | .37 | .57 |
| 16 | 7.7 | 7.5 | 7.7 | 7.0 | .80 | .85 | 1.7 | 2.4 | .84 | .77 | .37 | .77 |
| 17 | 7.7 | 7.5 | 7.5 | 7.0 | .70 | .77 | 1.2 | 1.6 | 1.1 | .77 | .34 | .57 |
| 18 | 7.9 | 7.7 | 7.5 | 7.0 | .66 | .77 | 1.1 | 1.3 | 1.2 | .73 | .34 | .57 |
| 19 | 7.9 | 7.5 | 7.5 | 7.0 | .62 | .73 | 1.0 | 1.2 | 1.1 | .73 | .34 | .57 |
| 20 | 7.9 | 7.5 | 7.5 | 7.0 | .60 | .67 | 1.0 | 1.1 | 1.1 | .89 | .31 | .57 |
| 21 | 7.9 | 7.5 | 7.3 | 7.0 | 6.0 | .67 | 1.0 | 1.1 | 1.0 | .89 | .31 | .53 |
| 22 | 7.9 | 7.3 | 7.3 | 1.0 | 5.0 | .67 | 1.2 | 1.1 | .98 | .73 | .31 | .57 |
| 23 | 7.9 | 7.3 | 7.0 | .60 | 4.7 | .67 | 1.7 | 1.0 | .90 | .73 | .31 | .44 |
| 24 | 7.9 | 7.9 | 7.0 | .60 | 4.1 | .67 | 1.4 | 1.0 | .90 | .73 | .31 | .34 |
| 25 | 8.5 | 7.7 | 7.0 | .60 | 3.8 | .63 | 1.2 | 1.0 | .90 | .67 | .28 | .31 |
| 26 | 8.1 | 7.5 | 7.2 | .58 | 4.4 | .64 | 1.1 | 1.0 | .90 | .73 | .28 | .34 |
| 27 | 7.9 | 7.5 | 7.2 | .58 | 4.3 | .67 | 1.0 | 1.0 | .84 | .73 | .37 | .34 |
| 28 | 7.9 | 8.3 | 7.2 | .58 | 3.4 | .85 | 1.3 | 1.0 | .90 | .63 | .44 | .34 |
| 29 | 8.3 | 7.7 | 7.2 | .56 | --- | 1.5 | 1.4 | 1.2 | .90 | .34 | .44 | .34 |
| 30 | 8.3 | 7.5 | 7.0 | .56 | --- | 2.1 | 1.2 | .98 | .90 | .34 | .44 | .34 |
| 31 | 8.1 | --- | 7.0 | .56 | --- | 1.9 | --- | .98 | --- | .37 | .44 | --- |
| TOTAL | 240.7 | 229.8 | 228.8 | 153.22 | 61.94 | 40.96 | 48.7 | 40.08 | 35.10 | 24.82 | 11.18 | 14.32 |
| MEAN | 7.76 | 7.66 | 7.38 | 4.94 | 2.21 | 1.32 | 1.62 | 1.29 | 1.17 | .80 | .36 | .48 |
| MAX | 8.5 | 8.3 | 7.7 | 7.0 | 6.0 | 3.4 | 2.6 | 4.1 | 2.9 | 1.2 | .44 | .77 |
| MIN | 7.3 | 7.3 | 7.0 | .56 | .50 | .63 | 1.0 | .74 | .80 | .34 | .28 | .31 |

CAL YR 1980 TOTAL 121959.32 MEAN 333 MAX 8130 MIN .35
WTR YR 1981 TOTAL 1129.62 MEAN 3.09 MAX 8.5 MIN .28

## 01376500 SAW MILL RIVER AT YONKERS, NY

LOCATION.--Lat 40°56'14", long 73°53'21", Westchester County, Hydrologic Unit 02030101, on right bank in Yonkers, 1,200 ft (366 m) downstream from Old Croton aqueduct, near intersection of Nepperhan Avenue and Walsh Avenue, and 1.0 mi (1.6 km) upstream from mouth.

DRAINAGE AREA.--25.6 mi² (66.3 km²).

PERIOD OF RECORD.--November 1943 to September 1973, April 1974 to current year.

REVISED RECORDS.--WRD NY 1971: 1965, 1966.

GAGE.--Water-stage recorder crest-stage gage. Datum of gage is 80.10 ft (24.414 m) National Geodetic Vertical Datum of 1929. Oct. 1, 1978 to Sept. 9, 1980, nonrecording and crest-stage gage at same site and datum. Prior to August 17, 1978, water-stage recorder and concrete control 1,300 ft (396 m) upstream at datum 10.89 ft (3.319 m) higher.

REMARKS.--Records poor. Flow affected by diversion by city of Yonkers, village of Tarrytown, and several industries for water supply and industrial purposes. Diurnal fluctuations caused by water supply and industrial operations.

COOPERATION.--Figures for diversion and return in upstream water supply furnished by city of Yonkers and village of Tarrytown.

AVERAGE DISCHARGE.--36 years (1944-73, 1975-81), 32.4 ft³/s (0.918 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,020 ft³/s (28.9 m³/s) Sept. 27, 1975, gage height, 7.26 ft (2.213 m); minimum, no flow during part of several days in Oct., Nov., and June-Sept. of 1981 water year because of construction in channel upstream from gage; minimum daily, 0.11 ft³/s (0.003 m³/s) Sept. 14, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 477 ft³/s (13.5 m³/s) Sept. 8, gage height, 3.28 ft (1.000 m); minimum, no flow during part of several days in Oct., Nov., and June-Sept. because of construction in channel upstream from gage; minimum daily, 0.11 ft³/s (0.003 m³/s) Sept. 14.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.2 | 3.0 | 11 | 5.2 | 1.0 | 49 | 17 | 30 | 17 | 6.2 | 3.0 | 16 |
| 2 | 3.5 | 5.5 | 10 | 4.3 | 30 | 43 | 28 | 52 | 30 | 17 | 3.5 | 4.9 |
| 3 | 10 | 6.2 | 10 | 3.5 | 60 | 39 | 16 | 30 | 23 | 65 | 4.6 | .66 |
| 4 | 26 | 8.1 | 7.3 | 2.7 | 25 | 36 | 14 | 21 | 19 | 79 | 2.4 | 1.5 |
| 5 | 7.7 | 9.5 | 5.2 | 2.3 | 13 | 35 | 24 | 20 | 15 | 145 | 1.6 | 2.0 |
| 6 | 3.2 | 2.4 | 5.5 | 5.0 | 7.0 | 35 | 74 | 20 | 13 | 23 | 1.6 | 3.5 |
| 7 | 3.0 | 1.6 | 4.6 | 15 | 5.6 | 35 | 27 | 20 | 11 | 13 | 6.2 | 4.9 |
| 8 | 5.5 | 1.3 | 3.2 | 9.0 | 4.5 | 34 | 20 | 17 | 9.9 | 8.1 | 2.6 | 40 |
| 9 | 4.3 | 4.0 | 4.6 | 6.4 | 10 | 33 | 19 | 17 | 11 | 5.8 | 1.5 | 98 |
| 10 | 6.2 | 4.6 | 9.9 | 5.0 | 35 | 23 | 22 | 18 | 11 | 4.9 | .75 | 3.7 |
| 11 | 6.2 | 6.6 | 5.2 | 4.0 | 90 | 21 | 20 | 56 | 9.5 | 3.0 | 2.2 | 1.1 |
| 12 | 10 | 3.0 | 2.6 | 3.4 | 143 | 22 | 20 | 215 | 8.6 | 1.5 | 1.2 | .86 |
| 13 | 5.5 | 1.3 | 1.6 | 2.9 | 48 | 22 | 16 | 160 | 8.1 | 2.2 | .86 | .75 |
| 14 | 5.2 | .86 | 2.6 | 2.6 | 33 | 21 | 56 | 72 | 11 | 2.0 | 7.3 | .11 |
| 15 | 4.9 | 1.2 | 9.0 | 2.3 | 20 | 20 | 77 | 92 | 17 | .16 | 2.0 | 6.9 |
| 16 | 4.0 | 2.0 | 6.2 | 2.0 | 19 | 20 | 34 | 134 | 3.7 | 1.5 | 12 | 41 |
| 17 | 6.9 | 1.3 | 5.8 | 1.7 | 17 | 20 | 29 | 79 | 15 | 1.6 | 1.3 | 12 |
| 18 | 15 | 21 | 4.0 | 1.4 | 17 | 17 | 34 | 55 | 2.2 | 1.3 | 2.0 | 3.0 |
| 19 | 14 | 17 | 3.0 | 1.2 | 18 | 16 | 29 | 46 | 6.9 | 4.3 | .75 | 1.3 |
| 20 | 7.3 | 10 | 2.6 | 1.1 | 127 | 17 | 25 | 40 | 2.0 | 20 | .66 | .75 |
| 21 | 5.8 | 9.5 | 2.3 | .98 | 151 | 16 | 20 | 36 | 13 | 68 | 2.8 | 2.0 |
| 22 | 2.8 | 8.1 | 2.2 | .86 | 120 | 15 | 20 | 34 | 11 | 17 | 3.2 | 11 |
| 23 | 3.2 | 6.9 | 2.2 | .76 | 81 | 15 | 29 | 31 | 4.9 | .97 | 4.0 | 15 |
| 24 | 9.0 | 28 | 6.0 | .68 | 111 | 17 | 62 | 29 | .75 | 4.3 | 3.7 | 5.2 |
| 25 | 81 | 72 | 3.5 | .66 | 102 | 15 | 36 | 28 | 20 | 1.3 | 6.9 | 1.8 |
| 26 | 97 | 14 | 2.3 | .64 | 93 | 15 | 29 | 26 | 11 | 1.1 | 1.6 | 3.7 |
| 27 | 17 | 6.9 | 3.0 | .64 | 74 | 15 | 25 | 23 | 2.6 | 1.5 | .16 | 4.0 |
| 28 | 10 | 86 | 5.0 | .62 | 56 | 14 | 28 | 23 | .97 | 2.0 | 11 | 4.6 |
| 29 | 2.0 | 72 | 8.0 | .62 | --- | 14 | 41 | 46 | 5.5 | .71 | 4.3 | 1.5 |
| 30 | 2.8 | 20 | 13 | .60 | --- | 21 | 56 | 23 | .16 | 2.8 | 2.8 | 5.8 |
| 31 | 1.2 | --- | 7.0 | .60 | --- | 27 | --- | 19 | --- | 2.4 | 2.6 | --- |
| TOTAL | 383.4 | 433.86 | 168.4 | 88.66 | 1511.1 | 742 | 947 | 1512 | 313.78 | 506.64 | 101.08 | 297.53 |
| MEAN | 12.4 | 14.5 | 5.43 | 2.86 | 54.0 | 23.9 | 31.6 | 48.8 | 10.5 | 16.3 | 3.26 | 9.92 |
| MAX | 97 | 86 | 13 | 15 | 151 | 49 | 77 | 215 | 30 | 145 | 12 | 98 |
| MIN | 1.2 | .86 | 1.6 | .60 | 1.0 | 14 | 14 | 17 | .16 | .16 | .16 | .11 |
| ♦ | 1.47 | 4.68 | 7.37 | 1.53 | 3.17 | 5.98 | 3.02 | 1.08 | 6.17 | 7.48 | 4.15 | 3.92 |

CAL YR 1980 TOTAL 12672.26 MEAN 34.6 MAX 900 MIN .30 ♦ 5.75
WTR YR 1981 TOTAL 7005.45 MEAN 19.2 MAX 215 MIN .11 ♦ 4.17

♦ Indicated net diversion, in cubic feet per second, for diversion and return in upstream supply.

## RESERVOIRS IN HUDSON RIVER BASIN

01335900 DELTA RESERVOIR.--Lat 43°16'20", long 75°25'50", Oneida County, Hydrologic Unit 02020004, on superstructure of gatehouse at Delta Dam on Mohawk River, and 4 mi (6 km) upstream from Rome. DRAINAGE AREA, 145 mi$^2$ (376 km$^2$). PERIOD OF RECORD, May 1913 to current year. GAGE, nonrecording gage read daily at 0800. Datum of gage is Barge Canal datum.

Dam completed Aug. 3, 1912, and controlled storage for which records are available began May 1, 1913. Usable capacity 2,800 mil ft$^3$ (79.3 hm$^3$) at crest of spillway, elevation 550.0 ft (167.64 m). Reservoir is used for navigation in Barge Canal. Records furnished by New York State Department of Transportation.

EXTREMES FOR PERIOD OF RECORD (1951-81): Maximum contents observed, 3,136 mil ft$^3$ (88.8 hm$^3$) June 22, 1972, elevation, 552.8 ft (168.49 m); minimum observed 2.0 mil ft$^3$ (0.0566 hm$^3$) Jan. 10, 13, 16-21, Feb. 7-15, Feb. 22 to Mar. 2, 1959, elevation, 492.0 ft (149.96 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 2,824 mil ft$^3$ (80.0 hm$^3$) Apr. 25-27, 30, May 19, Sept. 29 and 30, elevation, 550.2 ft (167.70 m); minimum observed, 610 mil ft$^3$ (17.3 hm$^3$) Nov. 27 and 28, elevation, 523.0 ft (159.41 ft).

01343900 HINCKLEY RESERVOIR.--Lat 43°18'45", long 75°06'25", Oneida County, Hydrologic Unit 02020004, on south side of north gatehouse at Hinckley Dam on West Canada Creek at Hinckley, and 2.2 mi (3.5 km) east of Prospect. DRAINAGE AREA, 374 mi$^2$ (969 km$^2$). PERIOD OF RECORD, March 1914 to current year. GAGE, nonrecording gage read daily at 0800. Datum of gage is Barge Canal datum.

Reservoir is formed by earth and concrete dam; storage began March 1914. Usable capacity 3,320 mil ft$^3$ (94.0 hm$^3$) between elevation 1,173.5 (357.68 m) and 1,225.0 ft (373.38 m). Elevation of inverts of four 60-inch discharge pipes at north end of spillway is 1,169.5 ft (356.46 m), and elevation of inverts of two 42-inch pipes at south end for diverting water to city of Utica is 1,164.25 ft (354.863 m). Crest of Ogee spillway is at elevation 1,225.0 ft (373.38 m). Length of spillway is 400 ft (122 m). Area of water surface at crest elevation is 4.46 mi$^2$ (11.6 km$^2$). Records furnished by New York State Department of Transportation.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 4,041 mil ft$^3$ (114 hm$^3$) Oct. 2, 1945, elevation, 1,230.2 ft (374.96 m); minimum observed (after initial filling), not determined.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 3,639 mil ft$^3$ (103 hm$^3$) Feb. 25, elevation, 1,227.4 ft (374.11 m); minimum observed, 656 mil ft$^3$ (18.6 hm$^3$) Feb. 1, elevation, 1,192.6 ft (363.50 m).

01350100 SHOHARIE RESERVOIR (see station for mean daily elevations, skeleton capacity table, monthly contents and change in contents).

01363400 ASHOKAN RESERVOIR.--Lat 41°57'01", long 74°12'30", Ulster County, Hydrologic Unit 02020006, at gatehouse located at Dividing Weir Dyke, and 1.6 mi (2.6 km) south of Shokan. DRAINAGE AREA, 256 mi$^2$ (663 km$^2$). PERIOD OF RECORD, September 1913 to current year. REVISED RECORDS, WRD NY 1972: 1968. GAGE, nonrecording gage read daily at 0900. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).

The reservoir is formed by the masonry Olive Bridge Dam across Esopus Creek and a series of earth embankments between hills. The reservoir is divided into two basins separated by a weir containing a gatehouse. Storage began Sept. 9, 1913. Usable capacity of West basin 47,180 mil gal (178.6 hm$^3$) between minimum operating level elevation 495.50 ft (151.028 m) and crest of spillway to East basin, elevation 590.00 ft (179.832 m); dead storage below minimum operating level 2,237 mil gal (8.467 hm$^3$). Usable capacity of East basin 80,678 mil gal (305.4 hm$^3$) between elevation 500.00 ft (152.400 m) and crest of spillway, elevation 587.10 ft (178.948 m); no dead storage. Figures given herein represent total contents for each basin. Reservoir impounds water for diversion into Catskill Aqueduct for New York City water supply (see elsewhere in this section). Any flood spillage enters the Esopus Creek channel below Olive Bridge Dam. Records furnished by Department of Environmental Protection, City of New York.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, in West basin, 54,001 mil gal (204.4 hm$^3$) Mar. 31, 1951, elevation, 594.33 ft (181.152 m), in East basin, 89,411 mil gal (338.4 hm$^3$) Mar. 31, 1951, elevation, 592.23 ft (180.512 m); minimum observed, in West basin, 9,098 mil gal (34.44 hm$^3$) Oct. 24, 1926, elevation, 530.56 ft (161.715 m), in East basin, 8,394 mil gal (31.77 hm$^3$) Oct. 24, 1926, elevation, 525.91 ft (160.297 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, in West basin, 51,112 mil gal (193.5 hm$^3$) Feb. 24, elevation, 591.60 ft (180.320 m), in East basin, 71,167 mil gal (269.4 hm$^3$) Aug. 12, elevation, 581.29 ft (177.177 m); minimum observed, in West basin, 14,480 mil gal (54.81 hm$^3$) Feb. 2, elevation, 543.87 ft (165.772 m), in East basin, 13,276 mil gal (50.25 hm$^3$) Feb. 20, elevation, 532.64 ft (162.349 m).

01366400 RONDOUT RESERVOIR.--Lat 41°47'57", long 74°25'48", Ulster County, Hydrologic Unit 02020007, at release chamber at Merriman Dam on Rondout Creek, 1.1 mi (1.8 km) upstream from Brandy Brook, and 1.3 mi (2.1 km) northwest of Lackawack. DRAINAGE AREA, 94.4 mi$^2$ (244 km$^2$). PERIOD OF RECORD, May 1951 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).

Reservoir is formed by an earthfill rockfaced dam; storage began May 10, 1951. Initial filling (to crest of spillway) Mar. 28, 1955. Usable capacity 50,048 mil gal (189 hm$^3$) between minimum operating level, elevation, 720.00 ft (219.45 m) and crest of spillway, elevation, 840.00 ft (256.03 m). Dead storage below elevation 720.00 ft (219.45 m), 2,387 mil gal (9.03 hm$^3$). Figures given herein represent total contents. Reservoir impounds water from Rondout Creek; water diverted from Cannonsville Reservoir in the Delaware River basin through West Delaware Tunnel; water diverted from Pepacton Reservoir through East Delaware Tunnel; and water diverted from Neversink Reservoir through Neversink-Grahamsville Tunnel. Water is diverted from Rondout Reservoir for New York City water supply through West Branch Tunnel of Delaware Aqueduct (see elsewhere in this section). Records furnished by Bureau of Water Resources Development, City of New York.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 53,355 mil gal (201.9 hm$^3$) June 23, 1972, elevation, 841.34 ft (256.440 m); minimum observed (after initial filling), 8,335 mil gal (31.55 hm$^3$) Oct. 15, 1957, elevation, 748.75 ft (228.219 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 51,612 mil gal (195.4 hm$^3$) July 7, elevation, 838.79 ft (255.663 m); minimum, 10,252 mil gal (38.80 hm$^3$) Jan. 26, elevation, 755.40 ft (230.246 m).

## RESERVOIRS IN HUDSON RIVER BASIN--Continued

### MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| Date | Elevation (feet) | Contents (million $ft^3$) | Change in contents (equivalent in $ft^3/s$) | Elevation (feet) | Contents (million $ft^3$) | Change in contents (equivalent in $ft^3/s$) |
|---|---|---|---|---|---|---|
| | 01335900 | Delta Reservoir * | | 01343900 | Hinckley Reservoir * | |
| Sept. 30 | 533.5 | 1,215 | | 1,205.1 | 1,447 | |
| Oct. 31 | 534.0 | 1,250 | + 13.1 | 1,210.3 | 1,854 | + 152 |
| Nov. 30 | 527.9 | 854 | -153 | 1,214.7 | 2,234 | + 147 |
| Dec. 31 | 532.7 | 1,159 | +114 | 1,209.9 | 1,822 | - 154 |
| CAL YR 1980 | - | - | - 33.6 | - | - | - 28.1 |
| Jan. 31 | 528.6 | 896 | - 98.2 | 1,192.4 | 646 | - 439 |
| Feb. 28 | 549.0 | 2,680 | +737 | 1,228.3 | 3,762 | +1,288 |
| Mar. 31 | 546.3 | 2,383 | -111 | 1,209.9 | 1,822 | - 724 |
| Apr. 30 | 550.1 | 2,812 | +166 | 1,223.2 | 3,108 | + 496 |
| May 31 | 548.9 | 2,669 | - 53.4 | 1,219.1 | 2,660 | - 167 |
| June 30 | 546.6 | 2,416 | - 97.6 | 1,214.3 | 2,199 | - 178 |
| July 31 | 543.5 | 2,090 | -122 | 1,210.6 | 1,878 | - 120 |
| Aug. 31 | 541.0 | 1,840 | - 93.3 | 1,208.4 | 1,702 | - 65.7 |
| Sept. 30 | 550.1 | 2,812 | +375 | 1,218.1 | 2,560 | + 331 |
| WTR YR 1981 | - | - | + 50.6 | - | - | + 35.3 |

| Date | Elevation (feet) | Contents (million gallons) | Change in contents (equivalent in $ft^3/s$) | Elevation (feet) | Contents (million gallons) | Change in contents (equivalent in $ft^3/s$) | Elevation (feet) | Contents (million gallons) | Change in contents (equivalent in $ft^3/s$) |
|---|---|---|---|---|---|---|---|---|---|
| | 01363398 | Ashokan Reservoir ** West Basin | | 01363399 | Ashokan Reservoir ** East Basin | | 01366400 | Rondout Reservoir ** | |
| Sept. 30 | 571.69 | 32,724 | | 571.35 | 56,120 | | 797.75 | 27,589 | |
| Oct. 31 | 564.57 | 27,187 | - 276 | 564.08 | 46,273 | -491 | 795.46 | 26,473 | - 55.7 |
| Nov. 30 | 558.99 | 23,253 | - 203 | 557.06 | 37,540 | -450 | 781.18 | 19,912 | -338 |
| Dec. 31 | 560.59 | 24,341 | + 54.3 | 547.49 | 26,922 | -530 | 772.82 | 16,410 | -175 |
| CAL YR 1980 | - | - | - 84.0 | - | - | -202 | - | - | -135 |
| Jan. 31 | 545.47 | 15,263 | - 453 | 541.26 | 20,799 | -306 | 757.95 | 11,047 | -268 |
| Feb. 28 | 590.88 | 50,350 | +1,939 | 552.83 | 32,654 | +655 | 792.80 | 25,199 | +782 |
| Mar. 31 | 590.53 | 49,979 | - 18.5 | 560.34 | 41,497 | +441 | 801.08 | 29,248 | +202 |
| Apr. 30 | 590.56 | 50,011 | + 1.65 | 565.05 | 47,516 | +310 | 813.80 | 36,035 | +350 |
| May 31 | 590.37 | 49,810 | - 10.0 | 577.37 | 65,030 | +874 | 835.50 | 49,409 | +668 |
| June 30 | 590.21 | 49,640 | - 8.77 | 577.57 | 65,338 | + 15.9 | 838.60 | 51,484 | +107 |
| July 31 | 590.22 | 49,651 | + 0.55 | 572.94 | 65,909 | + 28.5 | 837.66 | 50,850 | - 31.6 |
| Aug. 31 | 577.54 | 37,654 | - 599 | 581.05 | 70,780 | +243 | 837.72 | 50,890 | + 2.00 |
| Sept. 30 | 578.85 | 38,796 | + 58.9 | 576.83 | 64,197 | -340 | 837.27 | 50,588 | - 15.6 |
| WTR YR 1981 | - | - | + 25.7 | - | - | + 34.2 | - | - | - 97.5 |

* Elevation at 2400 hours by interpolation.

** Elevation at 0900 hours on first day of following month.

## DIVERSIONS IN HUDSON RIVER BASIN

Undetermined diversion at Solsville from Chenango River in Susquehanna River basin into Oriskany Creek in Mohawk River Basin through Oriskany Creek Feeder.

Undetermined diversion from (and occasionally into) Oswego River, tributary to Lake Ontario, through Summit level of Erie (Barge) Canal.

Undetermined diversion from Black River tributary into Lake Ontario through Black River canal into Mohawk River in Hudson River basin.

Undetermined diversion from Hudson River basin to summit level of Champlain (Barge) Canal.

01343899 Diversion from Hinckley Reservoir (see preceding pages) for municipal supply of Utica. Diversion began prior to 1921. Records furnished by Utica Board of Water Supply.

Diversion from Schoharie Reservoir (see preceding pages) on Schoharie Creek through Shandaken Tunnel to Esopus Creek at, 01362230 Lat 42°06'52", long 74°21'51", near Phoenicia, Ulster County. No diversion prior to 1924. Records furnished by Department of Environmental Protection, City of New York.

01359498 Diversion from Watervliet Reservoir from municipal supply of city of Watervliet and town of Guilderland (see station 01359519).

01363401 Diversion from Ashokan Reservoir (see preceding pages) on Esopus Creek through the Catskill Aqueduct for municipal supply of New York City. Completed in 1917. Records furnished by Department of Environmental Protection, City of New York.

01366399 Diversion from Rondout Reservoir. Total diversion from Rondout Reservoir to Delaware Aqueduct for municipal supply of City of New York. Rondout Reservoir is a collection basin for diversion from: Cannonsville Reservoir, Pepacton Reservoir, and Neversink Reservoir in the Delaware River basin and the Rondout Creek in the Hudson River basin. Diversion began April 1944 by means of temporary emergency connection to aqueduct. Records furnished by Bureau of Water Resources Development, City of New York.

01367630 Diversion from Morris Lake, tributary to Wallkill River, by Newtown Water and Sewer Authority for municipal use in New Jersey. After use the water is released into the Paulins Kill (Delaware River basin). Records available from the Delaware River Basin Commission.

DIVERSION, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| Month | 01343899 Hinckley Reservoir | 01362230 Schoharie Reservoir | 01363401 Ashokan Reservoir | 01366399 Rondout Reservoir |
|---|---|---|---|---|
| October........ | 35.1 | 6.81 | 933 | 1,340 |
| November....... | 28.9 | 52.5 | 955 | 1,320 |
| December....... | 30.9 | 232 | 1,012 | 1,060 |
| CAL YR 1980 | 33.3 | 158 | 873 | 1,290 |
| January........ | 30.4 | 110 | 976 | 1,070 |
| February....... | 33.2 | 743 | 914 | 711 |
| March.......... | 34.0 | 915 | 936 | 767 |
| April.......... | 32.1 | 766 | 966 | 668 |
| May............ | 31.2 | 487 | 784 | 760 |
| June........... | 31.3 | 305 | 577 | 1,190 |
| July........... | 36.6 | 245 | 605 | 1,180 |
| August......... | 35.4 | 255 | 699 | 1,340 |
| September...... | 34.9 | 215 | 763 | 1,300 |
| WTR YR 1981 | 32.9 | 361 | 843 | 1,060 |

## 01376800 HACKENSACK RIVER AT WEST NYACK, NY

**LOCATION.**--Lat 41°05'44", long 73°57'52", Rockland County, Hydrologic Unit 02030103, on right bank 20 ft (6 m) downstream from Penn Central Transportation Co. railroad bridge at West Nyack, 1,000 ft (305 m) upstream from State Highway 59, and 1.0 mi (1.6 km) downstream from DeForest Lake.

**DRAINAGE AREA.**--29.4 mi$^2$ (76.1 km$^2$).

**PERIOD OF RECORD.**--December 1958 to current year.

**GAGE.**--Water-stage recorder and stop-log control. Datum of gage is 53.50 ft (16.307 m) National Geodetic Vertical Datum of 1929 (levels by Hackensack Water Co.).

**REMARKS.**--Records fair. Flow regulated by DeForest Lake (see Reservoirs in Hackensack River Basin). Diversion from gaging station pool for municipal supply for village of Nyack (see Diversions in Hackensack River Basin). Discharge given for this station represents the flow of Hackensack River downstream from this diversion.

**EXTREMES FOR PERIOD OF RECORD.**--Maximum discharge, 1,550 ft$^3$/s (43.9 m$^3$/s) Feb. 3, 1973, gage height, 9.38 ft (2.859 m), from floodmarks, from rating curve extended above 840 ft$^3$/s (23.8 m$^3$/s); minimum daily, 2.6 ft$^3$/s (0.074 m$^3$/s) June 12, 1965, Sept. 25, 26, 30, 1966; minimum gage height, 1.70 ft (0.518 m) Oct. 22, 1960.

**EXTREMES FOR CURRENT YEAR.**--Maximum discharge, 185 ft$^3$/s (5.24 m$^3$/s) May 12, gage height, 4.59 ft (1.399 m); minimum discharge, 3.9 ft$^3$/s (0.110 m$^3$/s) Mar. 14, 15, 17, gage height, 2.49 ft (0.759 m).

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 51 | 14 | 9.9 | 14 | 8.9 | 8.4 | 11 | 11 | 12 | 12 | 12 | 12 |
| 2 | 49 | 14 | 12 | 14 | 21 | 7.9 | 11 | 12 | 13 | 13 | 12 | 12 |
| 3 | 45 | 14 | 12 | 14 | 8.4 | 7.9 | 11 | 9.4 | 12 | 15 | 12 | 12 |
| 4 | 40 | 15 | 9.4 | 14 | 8.4 | 7.9 | 11 | 9.9 | 12 | 20 | 12 | 11 |
| 5 | 28 | 15 | 9.9 | 15 | 7.9 | 8.4 | 12 | 11 | 11 | 22 | 13 | 11 |
| 6 | 28 | 15 | 11 | 12 | 7.9 | 8.4 | 9.9 | 11 | 11 | 11 | 12 | 11 |
| 7 | 27 | 15 | 11 | 11 | 7.9 | 8.4 | 7.9 | 11 | 12 | 12 | 12 | 12 |
| 8 | 27 | 15 | 11 | 11 | 9.9 | 8.4 | 8.9 | 11 | 14 | 11 | 13 | 13 |
| 9 | 27 | 16 | 13 | 12 | 8.4 | 7.0 | 9.4 | 11 | 17 | 12 | 13 | 16 |
| 10 | 27 | 17 | 16 | 11 | 8.9 | 6.5 | 9.4 | 11 | 14 | 11 | 12 | 12 |
| 11 | 27 | 16 | 16 | 12 | 28 | 6.5 | 9.4 | 28 | 14 | 12 | 12 | 11 |
| 12 | 27 | 16 | 17 | 12 | 13 | 6.5 | 8.9 | 66 | 14 | 14 | 13 | 11 |
| 13 | 27 | 15 | 17 | 12 | 7.9 | 6.1 | 8.9 | 14 | 16 | 12 | 13 | 11 |
| 14 | 27 | 15 | 17 | 12 | 8.9 | 6.1 | 14 | 14 | 14 | 12 | 13 | 11 |
| 15 | 27 | 15 | 17 | 12 | 8.9 | 6.1 | 9.9 | 15 | 14 | 13 | 13 | 11 |
| 16 | 27 | 15 | 17 | 12 | 9.4 | 6.1 | 9.9 | 19 | 12 | 12 | 13 | 17 |
| 17 | 27 | 14 | 16 | 12 | 9.4 | 5.7 | 11 | 13 | 12 | 12 | 13 | 13 |
| 18 | 22 | 11 | 15 | 12 | 9.4 | 6.1 | 11 | 12 | 12 | 12 | 13 | 12 |
| 19 | 15 | 9.4 | 14 | 12 | 11 | 6.5 | 11 | 12 | 11 | 12 | 12 | 12 |
| 20 | 13 | 11 | 14 | 12 | 86 | 6.5 | 11 | 14 | 12 | 21 | 12 | 12 |
| 21 | 14 | 11 | 15 | 11 | 25 | 6.5 | 9.9 | 12 | 12 | 19 | 12 | 12 |
| 22 | 12 | 11 | 15 | 11 | 16 | 6.5 | 11 | 11 | 13 | 9.1 | 12 | 12 |
| 23 | 11 | 11 | 14 | 11 | 9.9 | 6.5 | 13 | 11 | 12 | 11 | 12 | 13 |
| 24 | 12 | 17 | 14 | 11 | 41 | 6.5 | 12 | 12 | 12 | 13 | 12 | 12 |
| 25 | 23 | 18 | 15 | 9.9 | 9.4 | 6.1 | 11 | 12 | 13 | 13 | 12 | 12 |
| 26 | 14 | 11 | 15 | 8.9 | 7.9 | 6.5 | 12 | 11 | 13 | 13 | 12 | 12 |
| 27 | 14 | 11 | 14 | 8.9 | 7.0 | 6.5 | 11 | 11 | 12 | 12 | 12 | 12 |
| 28 | 14 | 26 | 14 | 9.4 | 7.9 | 6.5 | 9.9 | 11 | 12 | 12 | 12 | 12 |
| 29 | 14 | 13 | 14 | 8.9 | --- | 6.5 | 11 | 12 | 12 | 12 | 12 | 12 |
| 30 | 14 | 11 | 14 | 8.9 | --- | 8.4 | 11 | 11 | 12 | 12 | 12 | 13 |
| 31 | 14 | --- | 14 | 8.9 | --- | 7.4 | --- | 12 | --- | 11 | 12 | --- |
| TOTAL | 744 | 427.4 | 433.2 | 355.8 | 413.6 | 215.3 | 318.3 | 441.3 | 382 | 408.1 | 382 | 365 |
| MEAN | 24.0 | 14.2 | 14.0 | 11.5 | 14.8 | 6.95 | 10.6 | 14.2 | 12.7 | 13.2 | 12.3 | 12.2 |
| MAX | 51 | 26 | 17 | 15 | 86 | 8.4 | 14 | 66 | 17 | 22 | 13 | 17 |
| MIN | 11 | 9.4 | 9.4 | 8.9 | 7.0 | 5.7 | 7.9 | 9.4 | 11 | 9.1 | 12 | 11 |

CAL YR 1980 TOTAL 16792.6 MEAN 45.9 MAX 842 MIN 9.4
WTR YR 1981 TOTAL 4886.0 MEAN 13.4 MAX 86 MIN 5.7

## 01377000 HACKENSACK RIVER AT RIVERVALE, NJ

LOCATION.--Lat 40°59'55", long 73°59'27", Bergen County, Hydrologic Unit 02030103, on upstream right bank at bridge on Westwood Avenue in Rivervale, 1.5 mi (2.4 km) upstream from Pascack Brook, 4.6 mi (7.4 km) upstream from Oradell Dam, and 27.2 mi (43.8 km) upstream from mouth.

DRAINAGE AREA.--58.0 mi$^2$ (150.2 km$^2$).

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1941 to current year.

REVISED RECORDS.--WRD-NJ-80-1: 1968-79(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 22.51 ft (6.861 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. Flow regulated by De Forest Lake and Lake Tappan (see Hackensack River Basin, reservoirs in). Diversions from De Forest Lake and West Nyack, NY, for municipal water supply (see Hackensack River Basin, diversions).

COOPERATION.--Gage-height record collected in cooperation with Hackensack Water Co.

AVERAGE DISCHARGE.--40 years, 89.0 ft$^3$/s (2.522 m$^3$/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,160 ft$^3$/s (61.2 m$^3$/s) Sept. 27, 1975, gage height, 7.15 ft (2.179 m); no flow part of Jan. 16, 1970 and May 30, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 216 ft$^3$/s (6.12 m$^3$/s) Feb. 20, gage height, 2.50 ft (0.762 m); minimum, 3.4 ft$^3$/s (0.096 m$^3$/s) Jan. 30, gage height, 1.27 ft (0.387 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 69 | 24 | 41 | 9.5 | 17 | 16 | 12 | 14 | 14 | 14 | 27 | 94 |
| 2 | 61 | 23 | 20 | 9.6 | 46 | 14 | 18 | 19 | 17 | 16 | 28 | 93 |
| 3 | 70 | 22 | 21 | 10 | 17 | 13 | 11 | 15 | 16 | 27 | 41 | 92 |
| 4 | 75 | 24 | 17 | 11 | 14 | 12 | 11 | 14 | 16 | 21 | 65 | 92 |
| 5 | 60 | 25 | 17 | 14 | 13 | 14 | 13 | 13 | 14 | 30 | 65 | 91 |
| 6 | 41 | 24 | 17 | 16 | 13 | 14 | 22 | 14 | 13 | 17 | 65 | 90 |
| 7 | 36 | 24 | 15 | 16 | 13 | 13 | 13 | 13 | 13 | 15 | 66 | 90 |
| 8 | 35 | 25 | 11 | 14 | 14 | 14 | 12 | 12 | 13 | 14 | 67 | 88 |
| 9 | 34 | 26 | 11 | 14 | 16 | 12 | 12 | 12 | 13 | 14 | 67 | 68 |
| 10 | 32 | 36 | 13 | 14 | 14 | 12 | 13 | 12 | 13 | 14 | 67 | 37 |
| 11 | 35 | 30 | 11 | 16 | 49 | 12 | 13 | 36 | 13 | 14 | 67 | 36 |
| 12 | 35 | 26 | 11 | 20 | 30 | 12 | 12 | 113 | 12 | 14 | 67 | 35 |
| 13 | 33 | 24 | 10 | 28 | 16 | 11 | 12 | 31 | 13 | 17 | 65 | 36 |
| 14 | 32 | 24 | 9.5 | 52 | 16 | 11 | 24 | 18 | 16 | 22 | 65 | 35 |
| 15 | 31 | 24 | 9.3 | 64 | 15 | 9.9 | 19 | 19 | 16 | 24 | 75 | 35 |
| 16 | 32 | 23 | 9.8 | 63 | 15 | 10 | 14 | 39 | 14 | 28 | 88 | 46 |
| 17 | 32 | 22 | 9.6 | 55 | 16 | 9.8 | 13 | 18 | 13 | 31 | 83 | 38 |
| 18 | 32 | 34 | 9.4 | 53 | 15 | 9.5 | 15 | 17 | 13 | 71 | 76 | 37 |
| 19 | 33 | 37 | 9.4 | 52 | 17 | 9.6 | 13 | 16 | 14 | 75 | 76 | 36 |
| 20 | 24 | 26 | 8.5 | 50 | 133 | 9.5 | 12 | 16 | 15 | 85 | 81 | 36 |
| 21 | 21 | 22 | 8.4 | 48 | 35 | 9.5 | 12 | 16 | 15 | 76 | 79 | 36 |
| 22 | 21 | 21 | 8.3 | 47 | 22 | 9.5 | 12 | 15 | 19 | 37 | 89 | 36 |
| 23 | 27 | 19 | 8.9 | 49 | 18 | 9.5 | 13 | 16 | 14 | 32 | 98 | 40 |
| 24 | 28 | 30 | 9.0 | 46 | 61 | 9.5 | 21 | 15 | 14 | 31 | 98 | 65 |
| 25 | 63 | 72 | 9.0 | 42 | 18 | 9.5 | 14 | 14 | 17 | 29 | 98 | 97 |
| 26 | 64 | 50 | 13 | 32 | 17 | 10 | 13 | 14 | 17 | 29 | 96 | 96 |
| 27 | 58 | 47 | 12 | 24 | 15 | 9.8 | 14 | 14 | 14 | 31 | 96 | 86 |
| 28 | 52 | 82 | 11 | 25 | 15 | 9.5 | 14 | 15 | 14 | 28 | 96 | 74 |
| 29 | 33 | 62 | 10 | 21 | --- | 9.5 | 17 | 20 | 14 | 28 | 95 | 76 |
| 30 | 25 | 56 | 11 | 18 | --- | 11 | 20 | 16 | 13 | 28 | 94 | 79 |
| 31 | 24 | --- | 9.9 | 16 | --- | 12 | --- | 15 | --- | 28 | 94 | --- |
| TOTAL | 1248 | 984 | 391.0 | 949.1 | 700 | 347.6 | 434 | 631 | 433 | 940 | 2334 | 1890 |
| MEAN | 40.3 | 32.8 | 12.6 | 30.6 | 25.0 | 11.2 | 14.5 | 20.4 | 14.4 | 30.3 | 75.3 | 63.0 |
| MAX | 75 | 82 | 41 | 64 | 133 | 16 | 24 | 113 | 19 | 85 | 98 | 97 |
| MIN | 21 | 19 | 8.3 | 9.5 | 13 | 9.5 | 11 | 12 | 12 | 14 | 27 | 35 |

CAL YR 1980 TOTAL 35145.0 MEAN 96.0 MAX 1510 MIN 8.3
WTR YR 1981 TOTAL 11281.7 MEAN 30.9 MAX 133 MIN 8.3

## RESERVOIRS IN HACKENSACK RIVER BASIN, NJ

01376700 DE FOREST LAKE.--Lat 41°06', long 73°57', Rockland County, NY, Hydrologic Unit 02030103, at dam on Hackensack River, 0.85 mi (1.37 km) north of West Nyack, NY. DRAINAGE AREA, 26.6 mi$^2$ (68.9 km$^2$). PERIOD OF RECORD, February 1956 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by earthfill dam with sheet piling cutoff and concrete spillway; dam completed and storage began in February 1956. Total capacity at crest of dam 4,068,000,000 gal (15.40 hm$^3$), elevation, 80.00 ft (24.384 m). Crest of dam topped by two 50-foot (15.24 m) Bascule gates 5 ft (1.5 m) high. Flow regulated by 12-inch (0.3 m) Howell-Bunger valve at elevation, 59.25 ft (18.059 m) and 24-inch Howell-Bunger valve at elevation, 61.25 ft (18.669 m). Reservoir used for storage and water released by Hackensack Water Co., for municipal water supply. Record of elevation and contents furnished by Hackensack Water Co.

01376950 LAKE TAPPAN.--Lat 41°01'05", long 74°00'05", Bergen County, Hydrologic Unit 02030103, at dam on Hackensack River, 0.50 mi (0.80 km) north of Old Tappan. DRAINAGE AREA, about 49 mi$^2$ (127 km$^2$). PERIOD OF RECORD, October 1966 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by earthfill dam, completed in 1966. Capacity at spillway level, 3,378,000,000 gal (12.79 hm$^3$), elevation, 55.00 ft (16.764 m). Flow regulated by four Bascule gates and one sluice gate. Water is released by Hackensack Water Co., for municipal water supply. Record of elevation and contents furnished by Hackensack Water Co.

01377450 WOODCLIFF LAKE.--Lat 41°01', long 74°03', Bergen County, Hydrologic Unit 02030103, at dam on Pascack Brook, 0.75 mi (1.21 km) north of Hillsdale. DRAINAGE AREA, 19.4 mi$^2$ (50.2 km$^2$). PERIOD OF RECORD, December 1929 to current year. Monthend contents only, prior to September 1953, published in WSP 1302, 1722. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by earthfill dam, completed about 1905. Capacity at spillway level, 835,000,000 gal (3.160 hm$^3$), elevation, 94.33 ft (28.752 m). Flow is regulated by flashboards and one 36-inch (0.9 m) gate in center of dam. Water is released for diversion at New Milford by Hackensack Water Co., for municipal supply. Record of elevation and contents furnished by Hackensack Water Co.

01378480 ORADELL RESERVOIR.--Lat 40°57', long 74°02', Bergen County, Hydrologic Unit 02030103, at dam on Hackensack River at Oradell. DRAINAGE AREA, 113 mi$^2$ (293 km$^2$). PERIOD OF RECORD, December 1922 to current year. Monthend contents only, prior to September 1953, published in WSP 1302, 1722. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by hollow concrete dam, completed in 1922. Capacity at spillway level, 2,850,000,000 gal (10.79 hm$^3$), elevation, 22.66 ft (6.907 m). Flow regulated by seven sluice gates (7 by 9 ft or 2.1 by 2.7 m). Water is released for diversion by Hackensack Water Co., 1 mi (2 km) downstream from dam for municipal supply. Record of elevation and contents furnished by Hackensack Water Co.

### MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| Date | Elevation (feet) | Contents (million gallons) | Change in contents (equivalent in ft$^3$/s) | Elevation (feet) | Contents (million gallons) | Change in contents (equivalent in ft$^3$/s) | Elevation (feet) | Contents (million gallons) | Change in contents (equivalent in ft$^3$/s) |
|---|---|---|---|---|---|---|---|---|---|
| | 01376700 DE FOREST LAKE † | | | 01376950 LAKE TAPPAN † | | | 01377450 WOODCLIFF LAKE † | | |
| Sept. 30 | 72.37 | 1,995 | - | 34.00 | 0 | - | 67.00 | 0 | - |
| Oct. 31 | 70.70 | 1,576 | -20.9 | 34.00 | 0 | 0 | 78.33 | 161 | +8.0 |
| Nov. 30 | 70.89 | 1,623 | +2.4 | 34.00 | 0 | 0 | 78.70 | 171 | +0.5 |
| Dec. 31 | 70.47 | 1,518 | -5.2 | 41.46 | 288 | +14.4 | 78.90 | 176 | +.2 |
| CAL YR 1980 | - | - | -17.6 | - | - | -13.5 | - | - | -1.4 |
| Jan. 31 | 69.66 | 1,318 | -9.98 | 35.60 | 12 | -13.8 | 66.33 | 0 | -8.8 |
| Feb. 28 | 75.49 | 2,797 | +81.7 | 46.92 | 1,293 | +70.8 | 93.50 | 791 | +43.7 |
| Mar. 31 | 76.64 | 3,119 | +16.1 | 48.38 | 1,665 | +18.6 | 93.95 | 815 | +1.2 |
| Apr. 30 | 78.00 | 3,559 | +22.7 | 50.59 | 2,266 | +31.0 | 93.96 | 816 | +.1 |
| May 31 | 81.57 | 4,561 | +50.0 | 53.84 | 3,259 | +49.6 | 94.04 | 820 | +.2 |
| June 30 | 81.15 | 4,429 | -6.81 | 54.35 | 3,424 | +8.51 | 90.76 | 582 | -12.3 |
| July 31 | 80.87 | 4,341 | -4.4 | 54.39 | 3,592 | +8.38 | 86.92 | 408 | -8.7 |
| Aug. 31 | 78.84 | 3,740 | -30.0 | 49.90 | 2,152 | -71.9 | 80.90 | 198 | -10.5 |
| Sept. 30 | 77.75 | 3,432 | -15.9 | 46.64 | 1,306 | -43.6 | 82.95 | 261 | +3.2 |
| WTR YR 1981 | - | - | +6.1 | - | - | +5.54 | - | - | +1.1 |
| | 01378480 ORADELL RESERVOIR † | | | | | | | | |
| Sept. 30 | 14.66 | 1,478 | - | | | | | | |
| Oct. 31 | 15.38 | 1,609 | +6.5 | | | | | | |
| Nov. 30 | 16.67 | 1,862 | +13.0 | | | | | | |
| Dec. 31 | 13.62 | 1,290 | -28.5 | | | | | | |
| CAL YR 1980 | - | - | -7.1 | | | | | | |
| Jan. 31 | 13.30 | 1,233 | -2.8 | | | | | | |
| Feb. 28 | 21.72 | 2,913 | +92.8 | | | | | | |
| Mar. 31 | 18.95 | 2,309 | -30.1 | | | | | | |
| Apr. 30 | 18.83 | 2,283 | -1.3 | | | | | | |
| May 31 | 22.01 | 2,982 | +34.9 | | | | | | |
| June 30 | 18.41 | 2,196 | -40.5 | | | | | | |
| July 31 | 18.60 | 2,235 | +1.9 | | | | | | |
| Aug. 31 | 18.15 | 2,141 | -4.7 | | | | | | |
| Sept. 30 | 18.08 | 2,127 | -.7 | | | | | | |
| WTR YR 1981 | - | - | +2.8 | | | | | | |

† Elevation at 0800 on first day of following month.

## DIVERSIONS FROM HACKENSACK RIVER BASIN, NJ

01376699 Spring Valley Water Co., diverts water at De Forest Lake for municipal supply in Rockland County, NY. Records furnished by Spring Valley Water Co.

01376810 Village of Nyack, NY, diverts water from Hackensack River 100 ft (30 m) downstream from gaging station on Hackensack River at West Nyack, NY (sta 01376800) for municipal supply. Records furnished by Board of Water Commissioners of Nyack, NY.

01378490 Hackensack Water Co., diverts water for municipal supply from Oradell Reservoir at Haworth pumping station 2.0 mi (3.2 km) upstream from gaging station on Hackensack River at New Milford and from Hackensack River about 50 ft (15 m) above gaging station on Hackensack River at New Milford, NJ (sta 01378500).

01378520 Hackensack Water Co., diverts water from Hirshfeld Brook, a tributary of the Hackensack River, below the gaging station on Hackensack River at New Milford, NJ, for municipal supply. Records furnished by Hackensack Water Co.

### DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| Month | 01376699 SPRING VALLEY WATER CO. | 01376810 WEST NYACK, NY | 01378490 HACKENSACK WATER CO. |
|---|---|---|---|
| October | 2.82 | 1.97 | 79.3 |
| November | 2.91 | 1.93 | 76.9 |
| December | 2.67 | 1.91 | 74.9 |
| CAL YR 1980 | 9.0 | 2.22 | 136 |
| January | 0.37 | 1.9 | 73.9 |
| February | 0 | 1.77 | 72.6 |
| March | 0 | 1.81 | 108 |
| April | 0 | 1.87 | 107 |
| May | 0 | 2.03 | 108 |
| June | 4.09 | 2.21 | 124 |
| July | 8.68 | 2.47 | 123 |
| August | 14.9 | 2.43 | 133 |
| September | 10.4 | 2.19 | 126 |
| WTR YR 1981 | 3.94 | 2.04 | 101 |

Tabulation of diversion by pumpage from sources other than the Hackensack River into Oradell Reservoir. These figures are included in diversions from Hackensack River as noted above.

### DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| Month | SPARKILL CREEK (HUDSON RIVER BASIN) | 01378520 HIRSHFELD BROOK (HACKENSACK RIVER BASIN) | SADDLE RIVER (PASSAIC RIVER BASIN) | WELLS TO SURFACE SUPPLY |
|---|---|---|---|---|
| October | 0.15 | 0.98 | 6.66 | 1.53 |
| November | .19 | 1.63 | 9.09 | 1.56 |
| December | .01 | 1.55 | 12.2 | 1.58 |
| CAL YR 1980. | .03 | .71 | 10.4 | .60 |
| January | 0 | .97 | 10.5 | 2.01 |
| February | 1.14 | 3.27 | 21.3 | 1.86 |
| March | 1.09 | 2.79 | 15.1 | 1.44 |
| April | 1.41 | 3.62 | 20.2 | 1.92 |
| May | 1.70 | 2.47 | 16.1 | 1.39 |
| June | 1.68 | 2.86 | 16.0 | 1.87 |
| July | .91 | 2.70 | 15.0 | 1.86 |
| August | .07 | 2.0 | 8.05 | 1.84 |
| September | .39 | 2.34 | 6.68 | 2.07 |
| WTR YR 1981. | .72 | 2.25 | 13.0 | 1.74 |

## 01387400 RAMAPO RIVER AT RAMAPO, N.Y.

LOCATION.--Lat 41°08'25", long 74°10'14", Rockland County, Hydrologic Unit 02030103, on right bank, 105 ft (32.0 m) downstream from highway bridge on New York State Thruway at Ramapo, 500 ft (152 m) upstream from local bridge, and 0.4 mi (0.64 km) upstream from Torne Brook.

DRAINAGE AREA.--86.7 mi$^2$ (225 km$^2$).

PERIOD OF RECORD.--June 1979 to current year.

GAGE.--Water-stage recorder. Concrete control. Datum of gage is 297.00 ft (90.526 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair prior to Aug. 10 and good thereafter. Occasional regulation by Lake Sebago.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,080 ft$^3$/s (144 m$^3$/s) Mar. 22, 1980, gage height, 9.89 ft (3.014 m); minimum, 7.6 ft$^3$/s (0.22 m$^3$/s) Sept. 11, 12, 1980, Sept. 8, 1981, gage height, 1.35 ft (0.411 m).

REVISIONS.--The minimum discharge for the water year 1980 has been revised to 7.6 ft$^3$/s (0.22 m$^3$/s) Sept. 11, 12, 1980 gage height 1.35 ft (0.441 m) superseding figure published in the report for 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,050 ft$^3$/s (29.7 m$^3$/s) and maximum (*):

| Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) | Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 21 | 0500 | *2,410 | 68.3 | *6.92 | 2.109 | May 12 | 1900 | 2,000 | 56.6 | 6.35 | 1.935 |
| Feb. 24 | 1600 | 1,140 | 32.3 | 4.93 | 1.503 | | | | | | |

Minimum discharge, 7.6 ft$^3$/s (0.22 m$^3$/s) Sept. 8, gage height, 1.35 ft (0.411 m).

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 24 | 24 | 110 | 18 | 16 | 350 | 60 | 135 | 57 | 12 | 14 | 8.5 |
| 2 | 30 | 22 | 94 | 18 | 142 | 295 | 98 | 139 | 59 | 18 | 14 | 8.5 |
| 3 | 30 | 24 | 84 | 18 | 300 | 207 | 96 | 135 | 61 | 24 | 13 | 8.0 |
| 4 | 32 | 24 | 68 | 17 | 120 | 182 | 80 | 123 | 66 | 36 | 13 | 8.0 |
| 5 | 30 | 24 | 54 | 17 | 78 | 170 | 78 | 109 | 79 | 85 | 12 | 8.0 |
| 6 | 28 | 24 | 50 | 17 | 63 | 168 | 115 | 103 | 79 | 96 | 11 | 8.0 |
| 7 | 27 | 24 | 46 | 17 | 57 | 154 | 115 | 92 | 72 | 73 | 11 | 8.0 |
| 8 | 26 | 24 | 46 | 17 | 57 | 152 | 96 | 83 | 60 | 57 | 11 | 8.9 |
| 9 | 26 | 24 | 47 | 17 | 72 | 152 | 92 | 78 | 39 | 50 | 13 | 21 |
| 10 | 25 | 25 | 48 | 17 | 63 | 150 | 98 | 75 | 38 | 40 | 12 | 19 |
| 11 | 25 | 24 | 47 | 17 | 227 | 145 | 105 | 180 | 36 | 31 | 10 | 13 |
| 12 | 25 | 24 | 41 | 17 | 547 | 135 | 100 | 1920 | 32 | 27 | 11 | 11 |
| 13 | 25 | 23 | 39 | 17 | 241 | 125 | 96 | 1450 | 30 | 24 | 11 | 10 |
| 14 | 24 | 22 | 36 | 17 | 157 | 119 | 119 | 819 | 31 | 24 | 11 | 9.5 |
| 15 | 25 | 21 | 32 | 17 | 137 | 106 | 210 | 542 | 39 | 23 | 10 | 8.5 |
| 16 | 25 | 21 | 33 | 17 | 121 | 103 | 166 | 529 | 38 | 21 | 12 | 9.0 |
| 17 | 27 | 21 | 32 | 17 | 117 | 96 | 152 | 429 | 33 | 20 | 11 | 10 |
| 18 | 32 | 27 | 31 | 17 | 119 | 88 | 146 | 302 | 29 | 18 | 10 | 12 |
| 19 | 36 | 29 | 30 | 17 | 125 | 81 | 135 | 234 | 27 | 18 | 10 | 13 |
| 20 | 30 | 30 | 30 | 17 | 1330 | 76 | 119 | 197 | 25 | 22 | 10 | 13 |
| 21 | 26 | 26 | 24 | 17 | 2110 | 75 | 109 | 168 | 25 | 60 | 10 | 12 |
| 22 | 26 | 25 | 24 | 16 | 1320 | 72 | 96 | 150 | 24 | 50 | 9.5 | 12 |
| 23 | 25 | 25 | 24 | 16 | 865 | 71 | 100 | 133 | 28 | 35 | 9.5 | 12 |
| 24 | 25 | 34 | 24 | 16 | 1080 | 71 | 143 | 119 | 23 | 28 | 9.5 | 12 |
| 25 | 53 | 145 | 24 | 16 | 837 | 69 | 141 | 106 | 18 | 25 | 9.5 | 12 |
| 26 | 106 | 110 | 22 | 16 | 629 | 68 | 125 | 96 | 18 | 23 | 9.5 | 11 |
| 27 | 57 | 80 | 21 | 16 | 510 | 66 | 109 | 86 | 16 | 22 | 9.5 | 10 |
| 28 | 46 | 85 | 20 | 16 | 420 | 64 | 103 | 78 | 15 | 20 | 8.5 | 10 |
| 29 | 44 | 130 | 19 | 16 | --- | 60 | 137 | 73 | 12 | 19 | 8.5 | 10 |
| 30 | 41 | 110 | 18 | 16 | --- | 61 | 156 | 75 | 13 | 18 | 8.5 | 8.6 |
| 31 | 33 | --- | 18 | 16 | --- | 61 | --- | 66 | --- | 16 | 8.5 | --- |
| TOTAL | 1034 | 1251 | 1236 | 520 | 11860 | 3792 | 3495 | 8824 | 1122 | 1035 | 331.0 | 324.5 |
| MEAN | 33.4 | 41.7 | 39.9 | 16.8 | 424 | 122 | 117 | 285 | 37.4 | 33.4 | 10.7 | 10.8 |
| MAX | 106 | 145 | 110 | 18 | 2110 | 350 | 210 | 1920 | 79 | 96 | 14 | 21 |
| MIN | 24 | 21 | 18 | 16 | 16 | 60 | 60 | 66 | 12 | 12 | 8.5 | 8.0 |

CAL YR 1980 TOTAL 49067.5 MEAN 134 MAX 4400 MIN 9.2
WTR YR 1981 TOTAL 34824.5 MEAN 95.4 MAX 2110 MIN 8.0

## 01387420 RAMAPO RIVER AT SUFFERN, N.Y.

LOCATION.--Lat 41°07'06", long 74°09'38", Rockland County, Hydrologic Unit 02030103, on left bank, 145 ft (44.2 m) downstream from highway bridge on New York State Thruway at Suffern, and 1.1 mi (1.77 km) upstream from Mahwah River.

DRAINAGE AREA.--93.0 mi$^2$ (241 km$^2$).

PERIOD OF RECORD.--June 1979 to current year.

GAGE.--Water-stage recorder. Concrete control. Datum of gage is 264.44 ft (80.601 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor. Flow affected by diversion from Spring Valley Water Company well field upstream from station and by occasional regulation by Lake Sebago.

COOPERATION.--Figures of pumpage from well field furnished by Spring Valley Water Company.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 5,160 ft$^3$/s (146 m$^3$/s) Mar. 22, 1980 (gage height about 11.1 ft or 3.38 m) from rating curve extended above 1,800 ft$^3$/s (51 m$^3$/s) on basis of runoff comparison with station 1.5 mi (2.4 km) upstream; minimum 2.6 ft$^3$/s (0.07 m$^3$/s) Sept. 30, 1981, gage height, 1.23 ft (0.375 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,100 ft$^3$/s (31.2 m$^3$/s) and maximum(*):

| Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) | Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 20 | 1715 | *2,830 | 80.1 | *8.32 | 2.536 | May 12 | 0230 | 2,160 | 61.2 | 7.33 | 2.234 |
| Feb. 24 | 1415 | 1,250 | 35.4 | 5.45 | 1.661 | | | | | | |

Minimum discharge, 2.6 ft$^3$/s (0.07 m$^3$/s) Sept. 30, gage height 1.23 ft (0.375 m).

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 17 | 18 | 83 | 10 | 6.0 | 365 | 70 | 146 | 51 | 10 | 9.5 | 8.0 |
| 2 | 24 | 14 | 72 | 9.4 | 70 | 302 | 117 | 142 | 54 | 16 | 10 | 7.6 |
| 3 | 27 | 17 | 65 | 8.9 | 300 | 254 | 113 | 146 | 55 | 21 | 10 | 7.6 |
| 4 | 29 | 17 | 53 | 8.4 | 150 | 203 | 96 | 123 | 61 | 35 | 10 | 7.6 |
| 5 | 24 | 18 | 42 | 8.0 | 90 | 190 | 93 | 109 | 70 | 91 | 10 | 7.6 |
| 6 | 22 | 17 | 39 | 7.7 | 68 | 188 | 133 | 104 | 70 | 102 | 10 | 7.1 |
| 7 | 20 | 18 | 35 | 7.4 | 58 | 173 | 131 | 93 | 62 | 70 | 9.5 | 7.1 |
| 8 | 20 | 17 | 35 | 7.2 | 58 | 166 | 117 | 83 | 55 | 53 | 11 | 10 |
| 9 | 19 | 15 | 36 | 6.8 | 72 | 166 | 111 | 75 | 37 | 45 | 14 | 23 |
| 10 | 18 | 17 | 39 | 6.6 | 65 | 166 | 117 | 70 | 36 | 35 | 11 | 20 |
| 11 | 19 | 17 | 37 | 6.6 | 280 | 162 | 121 | 249 | 33 | 26 | 9.0 | 15 |
| 12 | 19 | 17 | 30 | 6.4 | 594 | 144 | 119 | 2080 | 27 | 21 | 14 | 12 |
| 13 | 17 | 15 | 27 | 6.4 | 309 | 127 | 115 | 1550 | 24 | 18 | 10 | 11 |
| 14 | 17 | 15 | 25 | 6.4 | 203 | 119 | 137 | 910 | 29 | 16 | 11 | 9.5 |
| 15 | 17 | 14 | 21 | 6.4 | 175 | 102 | 237 | 632 | 36 | 13 | 11 | 9.0 |
| 16 | 17 | 13 | 22 | 6.4 | 157 | 100 | 198 | 625 | 34 | 10 | 14 | 14 |
| 17 | 18 | 13 | 18 | 6.4 | 155 | 93 | 171 | 476 | 27 | 9.5 | 12 | 16 |
| 18 | 21 | 24 | 20 | 6.4 | 157 | 79 | 166 | 331 | 21 | 9.0 | 11 | 20 |
| 19 | 25 | 25 | 20 | 6.4 | 161 | 77 | 142 | 263 | 20 | 9.5 | 10 | 20 |
| 20 | 21 | 26 | 28 | 6.4 | 1430 | 74 | 125 | 224 | 17 | 16 | 10 | 19 |
| 21 | 20 | 21 | 19 | 6.4 | 2370 | 72 | 111 | 188 | 16 | 57 | 9.5 | 14 |
| 22 | 18 | 20 | 19 | 6.2 | 1510 | 68 | 98 | 164 | 17 | 50 | 9.0 | 13 |
| 23 | 17 | 20 | 17 | 6.2 | 1000 | 68 | 93 | 137 | 21 | 33 | 9.0 | 15 |
| 24 | 17 | 34 | 17 | 6.2 | 1210 | 68 | 139 | 117 | 20 | 24 | 9.5 | 15 |
| 25 | 49 | 139 | 17 | 6.2 | 955 | 67 | 148 | 100 | 15 | 19 | 10 | 14 |
| 26 | 93 | 104 | 16 | 6.2 | 696 | 65 | 129 | 89 | 15 | 17 | 8.5 | 12 |
| 27 | 59 | 74 | 15 | 6.0 | 567 | 65 | 111 | 79 | 14 | 15 | 8.5 | 12 |
| 28 | 45 | 81 | 14 | 6.0 | 434 | 65 | 100 | 70 | 12 | 14 | 8.5 | 11 |
| 29 | 42 | 125 | 13 | 6.0 | --- | 61 | 133 | 67 | 10 | 12 | 8.0 | 9.5 |
| 30 | 38 | 104 | 12 | 6.0 | --- | 62 | 168 | 67 | 11 | 10 | 8.5 | 3.7 |
| 31 | 30 | --- | 11 | 6.0 | --- | 72 | --- | 59 | --- | 9.5 | 8.0 | --- |
| TOTAL | 839 | 1069 | 917 | 212.0 | 13300.0 | 3983 | 3859 | 9568 | 970 | 886.5 | 314.0 | 370.3 |
| MEAN | 27.1 | 35.6 | 29.6 | 6.84 | 475 | 128 | 129 | 309 | 32.3 | 28.6 | 10.1 | 12.3 |
| MAX | 93 | 139 | 83 | 10 | 2370 | 365 | 237 | 2080 | 70 | 102 | 14 | 23 |
| MIN | 17 | 13 | 11 | 6.0 | 6.0 | 61 | 70 | 59 | 10 | 9.0 | 8.0 | 3.7 |
| ♦ | 7.6 | 7.7 | 11 | 12 | 12 | 13 | 13 | 13 | 12 | 8.5 | 0.34 | 0.63 |

CAL YR 1980 TOTAL 51990.4 MEAN 142 MAX 4540 MIN 7.7 ♦ 5.2
WTR YR 1981 TOTAL 36287.8 MEAN 99.4 MAX 2370 MIN 3.7 ♦ 9.2

♦ Diversion, in cubic feet per second, by pumpage from well field upstream of station.

## 01387450 MAHWAH RIVER NEAR SUFFERN, NY

LOCATION.--Lat 41°08'27", long 74°07'01", Rockland County, Hydrologic Unit 02030103, on left bank 13 ft (4 m) upstream from bridge on U.S. Highway 202, 2.5 mi (4.0 km) northeast of Suffern, and 4.8 mi (7.7 km) upstream from mouth.

DRAINAGE AREA.--12.3 $mi^2$ (31.9 $km^2$).

PERIOD OF RECORD.--August 1958 to current year.

REVISED RECORDS.--WRD NY-79-1: 1977.

GAGE.--Water-stage recorder. Datum of gage is 321.57 ft (98.015 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 18, 1976, water-stage recorder at site on right bank 13 ft (4 m) downstream, at present datum.

REMARKS.--Records fair except those below 10 $ft^3/s$ (0.28 $m^3/s$), which are poor. Occasional regulation from unknown source.

AVERAGE DISCHARGE.--23 years, 24.6 $ft^3/s$ (0.697 $m^3/s$).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,840 $ft^3/s$ (52.1 $m^3/s$) Nov. 8, 1977, gage height, 9.91 ft (3.021 m), from rating curve extended above 850 $ft^3/s$ (24.1 $m^3/s$) on basis of contracted-opening measurements at gage heights 8.52 ft (2.597 m) and 9.91 ft (3.021 m); minimum 0.05 $ft^3/s$ (0.001 $m^3/s$) Oct. 20, 21, 1970, result of temporary pumping from gage pool.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 $ft^3/s$ (5.67 $m^3/s$) and maximum (*):

| Date | Time | Discharge ($ft^3/s$) | Discharge ($m^3/s$) | Gage height (ft) | Gage height (m) | Date | Time | Discharge ($ft^3/s$) | Discharge ($m^3/s$) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 20 | 1630 | 640 | 18.1 | 5.39 | 1.643 | May 12 | 0315 | *644 | 18.2 | *5.40 | 1.646 |
| Feb. 24 | 0445 | 241 | 6.8 | 3.94 | 1.201 | | | | | | |

Minimum discharge, 0.47 $ft^3/s$ (0.01 $m^3/s$) Sept. 6, 7, gage height, 1.22 ft (0.372 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.2 | .67 | 15 | 2.5 | 1.6 | 45 | 11 | 17 | 11 | 3.8 | 2.1 | .61 |
| 2 | 1.3 | .63 | 12 | 2.4 | 33 | 37 | 23 | 22 | 12 | 5.1 | 2.0 | .60 |
| 3 | 2.2 | .63 | 11 | 2.3 | 25 | 32 | 15 | 18 | 13 | 9.8 | 1.9 | .55 |
| 4 | 3.8 | .67 | 8.8 | 2.3 | 13 | 25 | 13 | 16 | 14 | 13 | 1.9 | .55 |
| 5 | 2.3 | .67 | 7.5 | 2.3 | 7.7 | 26 | 14 | 15 | 15 | 58 | 1.8 | .52 |
| 6 | 1.5 | .67 | 6.6 | 2.2 | 6.1 | 24 | 24 | 14 | 11 | 39 | 1.7 | .48 |
| 7 | 1.2 | .67 | 6.2 | 2.2 | 5.8 | 23 | 17 | 13 | 9.5 | 25 | 1.5 | .49 |
| 8 | 1.2 | .63 | 6.4 | 2.1 | 7.2 | 23 | 15 | 12 | 8.6 | 17 | 1.7 | 1.4 |
| 9 | 1.2 | .71 | 6.8 | 2.1 | 11 | 21 | 15 | 12 | 8.4 | 13 | 2.2 | 3.0 |
| 10 | 1.2 | 1.0 | 7.6 | 2.1 | 7.3 | 19 | 17 | 12 | 7.9 | 10 | 1.3 | 2.0 |
| 11 | 1.2 | .93 | 7.2 | 2.1 | 49 | 18 | 16 | 57 | 7.5 | 8.3 | 1.2 | 1.3 |
| 12 | 1.2 | .80 | 6.3 | 2.0 | 67 | 17 | 15 | 385 | 6.8 | 7.0 | 1.6 | .86 |
| 13 | 1.1 | .71 | 6.0 | 2.0 | 46 | 16 | 15 | 202 | 6.5 | 6.0 | 1.4 | .72 |
| 14 | 1.1 | .75 | 5.7 | 2.0 | 28 | 15 | 29 | 101 | 9.0 | 5.2 | 1.2 | .69 |
| 15 | 1.1 | .80 | 5.2 | 2.0 | 19 | 14 | 42 | 71 | 9.5 | 4.6 | 1.1 | .67 |
| 16 | 1.1 | .75 | 5.2 | 2.0 | 16 | 14 | 31 | 76 | 8.1 | 4.0 | 1.2 | 1.1 |
| 17 | 1.1 | .75 | 5.0 | 2.0 | 16 | 13 | 27 | 55 | 6.9 | 3.7 | 1.0 | .98 |
| 18 | 1.5 | 2.5 | 4.7 | 2.0 | 16 | 12 | 24 | 44 | 6.1 | 3.3 | .90 | 1.1 |
| 19 | 3.0 | 3.0 | 4.7 | 2.0 | 17 | 12 | 21 | 37 | 5.9 | 3.2 | .75 | .99 |
| 20 | 1.7 | 1.6 | 4.2 | 2.0 | 342 | 12 | 19 | 31 | 6.3 | 4.4 | .76 | .79 |
| 21 | .71 | 1.2 | 3.8 | 2.0 | 297 | 11 | 17 | 27 | 6.6 | 14 | .69 | .71 |
| 22 | .71 | 1.2 | 3.6 | 1.9 | 169 | 11 | 16 | 24 | 7.0 | 9.9 | .65 | .72 |
| 23 | .71 | 1.3 | 3.6 | 1.9 | 101 | 11 | 16 | 20 | 6.7 | 7.0 | .60 | .87 |
| 24 | .71 | 5.0 | 3.6 | 1.9 | 169 | 10 | 26 | 18 | 5.4 | 5.5 | .59 | .85 |
| 25 | 14 | 19 | 3.6 | 1.8 | 100 | 10 | 21 | 16 | 5.2 | 4.6 | .63 | .78 |
| 26 | 7.0 | 8.0 | 3.1 | 1.8 | 74 | 9.7 | 17 | 15 | 5.4 | 4.2 | .62 | .71 |
| 27 | 1.7 | 7.8 | 2.9 | 1.8 | 60 | 9.8 | 15 | 14 | 4.8 | 3.7 | .62 | .71 |
| 28 | 1.1 | 21 | 2.9 | 1.8 | 52 | 9.3 | 15 | 13 | 4.0 | 3.1 | .59 | 1.0 |
| 29 | .87 | 29 | 2.8 | 1.8 | --- | 9.1 | 19 | 18 | 3.8 | 3.2 | .59 | 1.2 |
| 30 | .71 | 19 | 2.7 | 1.7 | --- | 10 | 23 | 16 | 3.6 | 2.7 | .61 | .89 |
| 31 | .67 | --- | 2.6 | 1.6 | --- | 12 | --- | 13 | --- | 2.4 | .60 | --- |
| TOTAL | 60.09 | 132.04 | 177.3 | 62.6 | 1755.7 | 530.9 | 588 | 1404 | 235.5 | 303.7 | 36.00 | 27.84 |
| MEAN | 1.94 | 4.40 | 5.72 | 2.02 | 62.7 | 17.1 | 19.6 | 45.3 | 7.85 | 9.80 | 1.16 | .93 |
| MAX | 14 | 29 | 15 | 2.5 | 342 | 45 | 42 | 385 | 15 | 58 | 2.2 | 3.0 |
| MIN | .67 | .63 | 2.6 | 1.6 | 1.6 | 9.1 | 11 | 12 | 3.6 | 2.4 | .59 | .48 |

CAL YR 1980 TOTAL 7512.21 MEAN 20.5 MAX 602 MIN .40
WTR YR 1981 TOTAL 5313.67 MEAN 14.6 MAX 385 MIN .48

## 01387500 RAMAPO RIVER NEAR MAHWAH, NJ

LOCATION.--Lat 41°05'51", long 74°09'48", Bergen County, Hydrologic Unit 02030103, on left bank 350 ft (107 m) downstream from State Highway 17, 0.6 mi (1.0 km) downstream from Mahwah River, and 1.0 mi (1.6 km) west of Mahwah. Water-quality samples collected at bridge 350 ft (107 m) upstream from gage at high flows.

DRAINAGE AREA.--118 mi$^2$ (306 km$^2$).

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1902 to December 1906, September 1922 to current year (October 1902 to February 1905 monthly discharge only, published in WSP 1302). Figures of daily discharge Feb. 10, 1903, to Dec. 31, 1904, published in WSP 97, 125, are unreliable and should not be used.

REVISED RECORDS.--WSP 781: 1904(M). WSP 1031: 1938, 1940. WSP 1552: 1923(M), 1924, 1925-26(M), 1927-28, 1933, 1937. WRD-NJ 1971: 1968(M).

GAGE.--Water-stage recorder. Datum of gage is 253.10 ft (77.145 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 31, 1906, nonrecording gage on former bridge at site 250 ft (76 m) downstream at different datum. Sept. 1, 1922 to Dec. 23, 1936, water-stage recorder just below former bridge at present datum.

REMARKS.--Water-discharge records fair. Occasional regulation from lakes and ponds upstream from the station.

AVERAGE DISCHARGE.--63 years (water years 1903-06,1923-81), 229 ft$^3$/s (6.485 m$^3$/s), 26.35 in/yr (669 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 12,400 ft$^3$/s (352 m$^3$/s) Oct. 9, 1903, gage height, 11.0 ft (3.35 m) from graph based on gage readings, site and datum then in use, from rating curve extended above 1,400 ft$^3$/s (39.6 m$^3$/s); maximum gage height, 12.44 ft (3.792 m) Nov. 8, 1977; minimum discharge, 4.6 ft$^3$/s (0.13 m$^3$/s) Sept. 30, 1981 (possible regulation); minimum daily discharge, 6.1 ft$^3$/s (0.17 m$^3$/s) Sept. 30, 1981 (possible regulation).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,400 ft$^3$/s (39.6 m$^3$/s) and maximum (*):

| Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) | Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 20 | 1715 | *3270 | 92.6 | 9.06 | 2.761 | May 12 | 1115 | 2520 | 71.4 | 8.47 | 2.582 |
| Feb. 24 | 1500 | 1450 | 41.1 | 7.13 | 2.173 | | | | | | |

Minimum discharge, 4.6 ft$^3$/s (0.13 m$^3$/s) Sept. 30, gage height, 2.12 ft (0.646 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 23 | 21 | 105 | 22 | 16 | 411 | 105 | 187 | 78 | 22 | 13 | 9.5 |
| 2 | 31 | 19 | 91 | 21 | 311 | 349 | 175 | 202 | 93 | 33 | 13 | 9.4 |
| 3 | 36 | 21 | 83 | 20 | 384 | 304 | 157 | 188 | 96 | 48 | 14 | 9.1 |
| 4 | 41 | 22 | 68 | 19 | 162 | 262 | 127 | 157 | 109 | 75 | 14 | 9.0 |
| 5 | 27 | 21 | 59 | 18 | 73 | 249 | 129 | 138 | 118 | 221 | 14 | 8.1 |
| 6 | 25 | 20 | 54 | 19 | 52 | 241 | 204 | 129 | 110 | 193 | 14 | 7.9 |
| 7 | 22 | 21 | 50 | 20 | 46 | 223 | 177 | 118 | 95 | 142 | 13 | 7.8 |
| 8 | 22 | 19 | 50 | 19 | 58 | 219 | 147 | 105 | 82 | 101 | 17 | 28 |
| 9 | 21 | 23 | 52 | 20 | 75 | 218 | 142 | 95 | 63 | 78 | 19 | 42 |
| 10 | 21 | 22 | 58 | 19 | 54 | 211 | 166 | 88 | 61 | 60 | 18 | 26 |
| 11 | 23 | 20 | 53 | 16 | 350 | 204 | 161 | 309 | 57 | 48 | 18 | 19 |
| 12 | 22 | 20 | 47 | 16 | 640 | 188 | 153 | 2390 | 50 | 40 | 25 | 16 |
| 13 | 21 | 20 | 44 | 14 | 314 | 172 | 154 | 1790 | 47 | 35 | 17 | 15 |
| 14 | 21 | 22 | 41 | 14 | 195 | 159 | 213 | 1030 | 61 | 32 | 16 | 13 |
| 15 | 21 | 20 | 37 | 13 | 148 | 144 | 330 | 688 | 63 | 27 | 15 | 13 |
| 16 | 22 | 17 | 40 | 14 | 125 | 140 | 263 | 699 | 57 | 22 | 21 | 35 |
| 17 | 21 | 18 | 37 | 16 | 122 | 130 | 232 | 554 | 50 | 20 | 16 | 22 |
| 18 | 26 | 37 | 33 | 15 | 124 | 118 | 222 | 412 | 44 | 19 | 13 | 28 |
| 19 | 28 | 33 | 34 | 19 | 139 | 109 | 193 | 340 | 42 | 31 | 12 | 26 |
| 20 | 23 | 31 | 29 | 15 | 1910 | 103 | 172 | 292 | 42 | 77 | 12 | 24 |
| 21 | 24 | 26 | 28 | 13 | 2620 | 97 | 153 | 254 | 43 | 135 | 11 | 20 |
| 22 | 23 | 25 | 26 | 13 | 1640 | 92 | 136 | 224 | 48 | 83 | 9.2 | 19 |
| 23 | 22 | 25 | 28 | 14 | 1100 | 92 | 138 | 194 | 41 | 50 | 9.6 | 23 |
| 24 | 22 | 72 | 28 | 14 | 1380 | 90 | 208 | 167 | 35 | 37 | 10 | 19 |
| 25 | 105 | 191 | 23 | 13 | 1050 | 88 | 200 | 147 | 32 | 30 | 10 | 18 |
| 26 | 129 | 112 | 23 | 13 | 756 | 85 | 168 | 132 | 31 | 27 | 9.5 | 16 |
| 27 | 61 | 90 | 23 | 15 | 616 | 84 | 146 | 120 | 27 | 26 | 10 | 16 |
| 28 | 46 | 134 | 24 | 18 | 480 | 80 | 136 | 108 | 23 | 22 | 9.9 | 16 |
| 29 | 41 | 183 | 26 | 19 | --- | 79 | 191 | 125 | 19 | 20 | 7.6 | 13 |
| 30 | 37 | 133 | 28 | 15 | --- | 90 | 227 | 111 | 19 | 17 | 8.2 | 6.1 |
| 31 | 30 | --- | 23 | 15 | --- | 107 | --- | 92 | --- | 15 | 9.1 | --- |
| TOTAL | 1037 | 1438 | 1345 | 511 | 14940 | 5138 | 5325 | 11585 | 1736 | 1786 | 418.1 | 533.9 |
| MEAN | 33.5 | 47.9 | 43.4 | 16.5 | 534 | 166 | 178 | 374 | 57.9 | 57.6 | 13.5 | 17.8 |
| MAX | 129 | 191 | 105 | 22 | 2620 | 411 | 330 | 2390 | 118 | 221 | 25 | 42 |
| MIN | 21 | 17 | 23 | 13 | 16 | 79 | 105 | 88 | 19 | 15 | 7.6 | 6.1 |
| CFSM | .28 | .41 | .37 | .14 | 4.53 | 1.41 | 1.51 | 3.17 | .49 | .49 | .11 | .15 |
| IN. | .33 | .45 | .42 | .16 | 4.71 | 1.62 | 1.68 | 3.65 | .55 | .56 | .13 | .17 |

CAL YR 1980 TOTAL 70440.0 MEAN 192 MAX 5630 MIN 13 CFSM 1.63 IN 22.21
WTR YR 1981 TOTAL 45793.0 MEAN 125 MAX 2620 MIN 6.1 CFSM 1.06 IN 14.44

(NOTE: WATER-QUALITY DATA FOR THIS STATION ARE NOT PUBLISHED IN THIS REPORT: THEY ARE PUBLISHED IN THE SERIES "WATER RESOURCES DATA FOR NEW JERSEY.")

## 01413500 EAST BRANCH DELAWARE RIVER AT MARGARETVILLE, NY

LOCATION.--Lat 42°08'41", long 74°39'14", Delaware County, Hydrologic Unit 02040102, on right bank at downstream side of bridge on Fair Street at intersection with Main Street at Margaretville, 0.2 mi (0.3 km) upstream from unnamed tributary, and 1.6 mi (2.6 km) downstream from Dry Brook.

DRAINAGE AREA.--163 mi$^2$ (422 km$^2$).

PERIOD OF RECORD.--February 1937 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,302.38 ft (396.965 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 9, 1937, nonrecording gage and Sept. 9, 1937 to Aug. 17, 1944, water-stage recorder, at same site at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good except those for winter period, which are fair.

AVERAGE DISCHARGE.--44 years, 307 ft$^3$/s (8.694 m$^3$/s), 25.58 in/yr (650 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,700 ft$^3$/s (445 m$^3$/s) Nov. 25, 1950, gage height, 13.84 ft (4.218 m), from rating curve extended above 8,700 ft$^3$/s (246 m$^3$/s); minimum, 5.0 ft$^3$/s (0.14 m$^3$/s) Aug. 5, 1964; minimum gage height, 0.89 ft (0.271 m) Sept. 30, Oct. 1, 1943, present datum.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,800 ft$^3$/s (79 m$^3$/s) and maximum (*):

| Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) | Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 2 | 1515 | 4,260 | 121 | 8.41 | 2.563 | Feb. 20 | 1815 | 4,520 | 128 | 8.63 | 2.630 |
| Feb. 11 | 2000 | *7,520 | 213 | *10.94 | 3.335 | May 12 | 1730 | 3,440 | 97.4 | 7.65 | 2.332 |

Minimum discharge, 16 ft$^3$/s (0.45 m$^3$/s) Oct. 1, 2, 10, 11; minimum gage height, 2.60 ft (0.792 m), Aug. 28-31, Sept. 1, 2.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 17 | 40 | 239 | 80 | 40 | 658 | 271 | 374 | 166 | 62 | 46 | 25 |
| 2 | 17 | 38 | 250 | 80 | 2230 | 550 | 664 | 360 | 146 | 105 | 48 | 24 |
| 3 | 18 | 36 | 326 | 78 | 1000 | 473 | 510 | 333 | 137 | 100 | 74 | 26 |
| 4 | 20 | 34 | 240 | 76 | 560 | 407 | 462 | 308 | 150 | 90 | 64 | 27 |
| 5 | 20 | 34 | 230 | 74 | 420 | 369 | 510 | 283 | 129 | 186 | 60 | 26 |
| 6 | 19 | 33 | 220 | 70 | 360 | 333 | 527 | 271 | 120 | 212 | 62 | 25 |
| 7 | 18 | 32 | 220 | 68 | 330 | 303 | 442 | 256 | 112 | 166 | 49 | 25 |
| 8 | 17 | 32 | 254 | 66 | 300 | 283 | 397 | 227 | 100 | 134 | 58 | 29 |
| 9 | 17 | 36 | 278 | 64 | 260 | 263 | 393 | 204 | 97 | 118 | 53 | 123 |
| 10 | 17 | 52 | 262 | 62 | 240 | 248 | 397 | 190 | 92 | 110 | 40 | 59 |
| 11 | 17 | 53 | 210 | 60 | 3260 | 240 | 351 | 383 | 88 | 95 | 37 | 43 |
| 12 | 18 | 47 | 170 | 60 | 3010 | 223 | 320 | 2910 | 83 | 88 | 36 | 37 |
| 13 | 19 | 45 | 150 | 60 | 1390 | 216 | 291 | 2140 | 110 | 79 | 34 | 35 |
| 14 | 20 | 49 | 140 | 60 | 1020 | 212 | 312 | 1390 | 150 | 71 | 31 | 42 |
| 15 | 19 | 47 | 130 | 58 | 742 | 190 | 320 | 1160 | 159 | 67 | 31 | 106 |
| 16 | 18 | 44 | 120 | 56 | 624 | 201 | 275 | 1420 | 118 | 62 | 51 | 67 |
| 17 | 17 | 41 | 115 | 54 | 671 | 169 | 271 | 1020 | 97 | 53 | 40 | 58 |
| 18 | 23 | 49 | 115 | 52 | 706 | 153 | 267 | 804 | 86 | 49 | 34 | 54 |
| 19 | 29 | 47 | 110 | 50 | 787 | 146 | 240 | 664 | 79 | 48 | 31 | 50 |
| 20 | 27 | 45 | 110 | 50 | 2460 | 143 | 223 | 555 | 76 | 74 | 28 | 49 |
| 21 | 26 | 42 | 110 | 48 | 2490 | 132 | 208 | 468 | 95 | 169 | 27 | 45 |
| 22 | 25 | 44 | 110 | 47 | 1930 | 132 | 193 | 397 | 137 | 90 | 27 | 53 |
| 23 | 25 | 44 | 100 | 46 | 1420 | 129 | 204 | 342 | 137 | 67 | 26 | 85 |
| 24 | 24 | 217 | 96 | 44 | 1830 | 129 | 283 | 299 | 102 | 55 | 28 | 145 |
| 25 | 45 | 624 | 92 | 44 | 1290 | 126 | 244 | 263 | 100 | 51 | 31 | 143 |
| 26 | 220 | 363 | 90 | 44 | 1070 | 120 | 216 | 235 | 102 | 49 | 27 | 109 |
| 27 | 89 | 274 | 90 | 48 | 868 | 132 | 201 | 208 | 92 | 71 | 26 | 102 |
| 28 | 62 | 291 | 88 | 45 | 735 | 132 | 193 | 186 | 81 | 58 | 25 | 157 |
| 29 | 53 | 335 | 84 | 42 | --- | 126 | 312 | 201 | 74 | 67 | 25 | 125 |
| 30 | 47 | 262 | 82 | 40 | --- | 146 | 473 | 212 | 69 | 62 | 25 | 107 |
| 31 | 42 | --- | 80 | 39 | --- | 235 | --- | 201 | --- | 51 | 25 | --- |
| TOTAL | 1045 | 3330 | 4911 | 1765 | 32043 | 7319 | 9970 | 18264 | 3284 | 2759 | 1199 | 2001 |
| MEAN | 33.7 | 111 | 158 | 56.9 | 1144 | 236 | 332 | 589 | 109 | 89.0 | 38.7 | 66.7 |
| MAX | 220 | 624 | 326 | 80 | 3260 | 658 | 664 | 2910 | 166 | 212 | 74 | 157 |
| MIN | 17 | 32 | 80 | 39 | 40 | 120 | 193 | 186 | 69 | 48 | 25 | 24 |
| CFSM | .21 | .68 | .97 | .35 | 7.02 | 1.45 | 2.04 | 3.61 | .67 | .55 | .24 | .41 |
| IN. | .24 | .76 | 1.12 | .40 | 7.31 | 1.67 | 2.28 | 4.17 | .75 | .63 | .27 | .46 |

CAL YR 1980 TOTAL 76940 MEAN 210 MAX 5260 MIN 14 CFSM 1.29 IN 17.56
WTR YR 1981 TOTAL 87890 MEAN 241 MAX 3260 MIN 17 CFSM 1.48 IN 20.06

## 01414500 MILL BROOK NEAR DUNRAVEN, NY

LOCATION.--Lat 42°06'22", long 74°43'51", Delaware County, Hydrologic Unit 02040102, on left bank 0.4 mi (0.6 km) upstream from bridge on New York City Road 9 and Pepacton Reservoir, and 2.7 mi (4.3 km) southwest of Dunraven.

DRAINAGE AREA.--25.0 mi$^2$ (64.7 km$^2$).

PERIOD OF RECORD.--February 1937 to current year. Published as "at Arena" 1937-67.

REVISED RECORDS.--WSP 1432: 1937.

GAGE.--Water-stage recorder. Datum of gage is 1,298.54 ft (395.795 m) Board of Water Supply, City of New York datum. Prior to Oct. 17, 1939, nonrecording gage at site 0.2 mi (0.3 km) downstream at different datum. Oct. 17 to Dec. 8, 1939, nonrecording gage at present site at different datum.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--44 years, 56.1 ft$^3$/s (1.589 m$^3$/s), 30.47 in/yr (774 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,500 ft$^3$/s (127 m$^3$/s) Sept. 21, 1938, from rating curve extended above 960 ft$^3$/s (27.2 m$^3$/s) on basis of velocity-area study; maximum gage height, 9.92 ft (3.024 m) Nov. 25, 1950; minimum discharge observed, 1.2 ft$^3$/s (0.034 m$^3$/s) Sept. 25, 26, 1939, gage height, 0.71 ft (0.216 m), site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 740 ft$^3$/s (21 m$^3$/s) and maximum (*):

| Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) | Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 2 | 1400 | *3,050 | 86.4 | *7.0 | 2.13 | Feb. 20 | 1630 | 1,530 | 43.3 | 6.19 | 1.887 |
| Feb. 11 | 1800 | 2,400 | 68.0 | 6.7 | 2.04 | May 12 | 1430 | 1,890 | 53.5 | 6.42 | 1.957 |

Minimum discharge, 2.8 ft$^3$/s (0.08 m$^3$/s) Oct. 10, 11, gage height, 2.81 ft (0.856 m).

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.0 | 5.6 | 40 | 11 | 5.4 | 72 | 64 | 49 | 25 | 12 | 9.2 | 5.6 |
| 2 | 3.1 | 5.4 | 39 | 10 | 1330 | 64 | 156 | 49 | 23 | 13 | 8.7 | 5.6 |
| 3 | 3.2 | 5.2 | 53 | 9.8 | 452 | 55 | 109 | 47 | 23 | 13 | 8.4 | 5.6 |
| 4 | 3.1 | 5.0 | 41 | 9.6 | 250 | 50 | 90 | 43 | 26 | 12 | 8.4 | 5.6 |
| 5 | 3.1 | 5.0 | 41 | 9.4 | 160 | 44 | 104 | 41 | 21 | 19 | 7.9 | 5.6 |
| 6 | 3.0 | 5.0 | 37 | 9.0 | 100 | 40 | 109 | 40 | 19 | 17 | 8.4 | 5.6 |
| 7 | 3.0 | 5.0 | 34 | 8.6 | 70 | 37 | 90 | 37 | 17 | 14 | 7.9 | 5.6 |
| 8 | 3.0 | 5.1 | 36 | 8.2 | 50 | 34 | 79 | 33 | 16 | 12 | 8.7 | 6.7 |
| 9 | 3.0 | 5.7 | 40 | 8.0 | 45 | 35 | 76 | 31 | 18 | 12 | 8.4 | 9.2 |
| 10 | 2.9 | 6.5 | 40 | 7.6 | 40 | 36 | 72 | 29 | 17 | 12 | 7.9 | 8.4 |
| 11 | 2.9 | 6.5 | 35 | 7.2 | 1100 | 35 | 65 | 104 | 16 | 10 | 7.4 | 7.4 |
| 12 | 3.0 | 6.5 | 32 | 6.8 | 416 | 33 | 59 | 1100 | 15 | 10 | 7.4 | 6.9 |
| 13 | 3.0 | 6.6 | 29 | 6.6 | 202 | 33 | 54 | 376 | 17 | 9.2 | 6.9 | 6.2 |
| 14 | 3.0 | 6.9 | 27 | 6.4 | 134 | 32 | 59 | 202 | 19 | 9.2 | 6.9 | 14 |
| 15 | 3.0 | 7.1 | 27 | 6.2 | 98 | 33 | 56 | 181 | 21 | 9.2 | 6.9 | 26 |
| 16 | 3.0 | 7.2 | 27 | 6.0 | 82 | 30 | 52 | 269 | 17 | 8.7 | 10 | 15 |
| 17 | 3.0 | 7.1 | 27 | 5.8 | 86 | 28 | 52 | 187 | 16 | 8.7 | 9.5 | 13 |
| 18 | 3.4 | 7.9 | 27 | 5.6 | 102 | 26 | 50 | 149 | 14 | 8.4 | 8.4 | 13 |
| 19 | 3.3 | 7.8 | 26 | 5.4 | 146 | 25 | 45 | 120 | 13 | 8.4 | 7.6 | 12 |
| 20 | 3.1 | 7.8 | 27 | 5.4 | 696 | 25 | 41 | 96 | 12 | 13 | 7.4 | 11 |
| 21 | 3.1 | 9.5 | 26 | 5.4 | 386 | 25 | 37 | 79 | 16 | 25 | 6.7 | 11 |
| 22 | 3.1 | 7.8 | 26 | 5.2 | 236 | 22 | 36 | 67 | 23 | 15 | 6.2 | 13 |
| 23 | 3.0 | 8.2 | 25 | 5.0 | 173 | 22 | 37 | 58 | 24 | 11 | 6.2 | 20 |
| 24 | 3.0 | 64 | 20 | 4.9 | 236 | 20 | 43 | 52 | 18 | 10 | 6.2 | 28 |
| 25 | 9.4 | 106 | 18 | 4.9 | 164 | 20 | 40 | 46 | 18 | 9.5 | 6.0 | 27 |
| 26 | 23 | 60 | 16 | 4.8 | 127 | 19 | 39 | 40 | 19 | 9.2 | 5.4 | 24 |
| 27 | 11 | 44 | 15 | 4.7 | 100 | 21 | 36 | 36 | 17 | 11 | 5.8 | 24 |
| 28 | 7.7 | 49 | 14 | 4.7 | 83 | 21 | 35 | 32 | 15 | 10 | 5.8 | 34 |
| 29 | 6.6 | 56 | 13 | 4.6 | --- | 21 | 45 | 31 | 14 | 11 | 5.6 | 27 |
| 30 | 6.1 | 46 | 12 | 4.5 | --- | 29 | 53 | 28 | 13 | 11 | 5.6 | 25 |
| 31 | 5.8 | --- | 11 | 4.5 | --- | 55 | --- | 29 | --- | 9.8 | 5.6 | --- |
| TOTAL | 142.9 | 575.4 | 881 | 205.8 | 7069.4 | 1042 | 1883 | 3681 | 542 | 363.3 | 227.4 | 421.0 |
| MEAN | 4.61 | 19.2 | 28.4 | 6.64 | 252 | 33.6 | 62.8 | 119 | 18.1 | 11.7 | 7.34 | 14.0 |
| MAX | 23 | 106 | 53 | 11 | 1330 | 72 | 156 | 1100 | 26 | 25 | 10 | 34 |
| MIN | 2.9 | 5.0 | 11 | 4.5 | 5.4 | 19 | 35 | 28 | 12 | 8.4 | 5.4 | 5.6 |
| CFSM | .18 | .77 | 1.14 | .27 | 10.1 | 1.34 | 2.51 | 4.76 | .72 | .47 | .29 | .56 |
| IN. | .21 | .86 | 1.31 | .31 | 10.52 | 1.55 | 2.80 | 5.48 | .81 | .54 | .34 | .63 |

CAL YR 1980 TOTAL 18789.6 MEAN 51.3 MAX 3800 MIN 2.9 CFSM 2.05 IN 27.96
WTR YR 1981 TOTAL 17034.2 MEAN 46.7 MAX 1330 MIN 2.9 CFSM 1.87 IN 25.35

## 01415000 TREMPER KILL NEAR ANDES, NY

LOCATION.--Lat 42°07'12", long 74°49'08", Delaware County, Hydrologic Unit 02040102, on right bank 500 ft (152 m) upstream from bridge on County Highway 1, about 1,700 ft (518 m) upstream from Pepacton Reservoir, and 5 mi (8 km) south of Andes.

DRAINAGE AREA.--33.0 mi² (85.5 km²).

PERIOD OF RECORD.--February 1937 to current year. Published as "near Shavertown" 1937-67.

GAGE.--Water-stage recorder. Concrete control since Nov. 1937. Datum of gage is 1,285.87 ft (391.933 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 5, 1937, nonrecording gage at site 500 ft (152 m) downstream at different datum. Aug. 5 to Sept. 28, 1937, nonrecording gage at site 0.25 mi (0.40 km) downstream at different datum.

REMARKS.--Records good except for winter periods and periods of no gage height record Oct. 6-31, which are poor.

AVERAGE DISCHARGE.--44 years, 59.8 ft³/s (1.694 m³/s), 24.61 in/yr (625 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,250 ft³/s (120 m³/s) Sept. 21, 1938, gage height, 7.12 ft (2.170 m), from rating curve extended above 1,500 ft³/s (42.5 m³/s); minimum, 0.5 ft³/s (0.014 m³/s) Sept. 17, 21, 22, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s (20 m³/s) and maximum (*):

| Date | Time | Discharge (ft³/s) | Discharge (m³/s) | Gage height (ft) | Gage height (m) | Date | Time | Discharge (ft³/s) | Discharge (m³/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 2 | 1415 | 970 | 27.5 | 4.87 | 1.484 | Feb. 20 | | Unknown | | Unknown | |
| Feb. 11 | 1515 | a*1,800 | 51.0 | b*6.13 | 1.868 | | | | | | |

a About.
b Backwater from ice jam.

Minimum discharge, 2.5 ft³/s (0.071 m³/s) occurred during period of no gage height record Oct. 6-31, gage height, 2.33 ft (0.710 m), from recorded range in stage.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.2 | 18 | 49 | 14 | 6.0 | 80 | 63 | 131 | 23 | 11 | 8.5 | 5.8 |
| 2 | 3.6 | 17 | 49 | 13 | 400 | 68 | 117 | 110 | 21 | 11 | 7.7 | 4.6 |
| 3 | 5.2 | 15 | 67 | 13 | 250 | 62 | 99 | 91 | 20 | 11 | 7.6 | 7.2 |
| 4 | 4.2 | 14 | 48 | 12 | 180 | 58 | 92 | 77 | 23 | 11 | 7.6 | 6.8 |
| 5 | 3.8 | 14 | 46 | 12 | 140 | 54 | 102 | 68 | 18 | 21 | 7.9 | 5.7 |
| 6 | 3.5 | 13 | 45 | 11 | 120 | 50 | 92 | 62 | 19 | 14 | 8.0 | 12 |
| 7 | 3.0 | 12 | 54 | 11 | 100 | 46 | 78 | 54 | 16 | 11 | 6.6 | 12 |
| 8 | 2.8 | 13 | 59 | 10 | 86 | 44 | 71 | 47 | 14 | 9.2 | 8.6 | 32 |
| 9 | 2.6 | 18 | 68 | 9.8 | 76 | 42 | 73 | 42 | 14 | 7.9 | 8.2 | 62 |
| 10 | 2.5 | 29 | 62 | 9.4 | 100 | 41 | 70 | 38 | 12 | 7.9 | 6.2 | 35 |
| 11 | 2.6 | 25 | 46 | 8.8 | 900 | 40 | 62 | 63 | 11 | 6.8 | 5.6 | 27 |
| 12 | 3.5 | 23 | 41 | 8.6 | 200 | 39 | 57 | 343 | 10 | 6.1 | 6.2 | 24 |
| 13 | 5.0 | 22 | 54 | 8.4 | 90 | 38 | 50 | 251 | 14 | 5.8 | 5.4 | 22 |
| 14 | 4.7 | 26 | 50 | 8.2 | 70 | 37 | 60 | 173 | 22 | 5.8 | 4.9 | 36 |
| 15 | 4.2 | 25 | 48 | 8.0 | 58 | 36 | 56 | 162 | 22 | 5.5 | 5.5 | 72 |
| 16 | 4.0 | 23 | 44 | 7.8 | 52 | 36 | 50 | 221 | 18 | 5.2 | 16 | 49 |
| 17 | 3.8 | 21 | 40 | 7.6 | 48 | 30 | 52 | 151 | 14 | 4.7 | 9.5 | 43 |
| 18 | 5.0 | 26 | 38 | 7.4 | 45 | 29 | 50 | 123 | 12 | 4.4 | 6.7 | 38 |
| 19 | 13 | 26 | 35 | 7.2 | 42 | 32 | 44 | 102 | 10 | 4.2 | 5.6 | 35 |
| 20 | 11 | 23 | 32 | 7.0 | 700 | 35 | 42 | 85 | 9.6 | 17 | 4.9 | 32 |
| 21 | 9.6 | 21 | 30 | 7.0 | 400 | 38 | 39 | 72 | 22 | 28 | 4.2 | 28 |
| 22 | 8.8 | 24 | 27 | 6.8 | 270 | 39 | 37 | 61 | 33 | 15 | 4.0 | 32 |
| 23 | 8.4 | 22 | 25 | 6.8 | 230 | 38 | 42 | 52 | 31 | 9.6 | 3.8 | 47 |
| 24 | 8.0 | 95 | 24 | 6.6 | 180 | 33 | 56 | 45 | 22 | 7.9 | 5.3 | 76 |
| 25 | 15 | 128 | 22 | 6.6 | 150 | 28 | 49 | 40 | 22 | 7.1 | 6.0 | 62 |
| 26 | 80 | 87 | 20 | 6.6 | 120 | 25 | 45 | 38 | 21 | 7.2 | 4.4 | 55 |
| 27 | 45 | 65 | 19 | 6.4 | 100 | 28 | 43 | 35 | 18 | 21 | 3.6 | 52 |
| 28 | 33 | 75 | 18 | 6.4 | 88 | 28 | 42 | 31 | 15 | 12 | 3.3 | 55 |
| 29 | 27 | 72 | 17 | 6.2 | --- | 28 | 122 | 30 | 12 | 16 | 3.5 | 46 |
| 30 | 23 | 55 | 16 | 6.2 | --- | 35 | 157 | 27 | 12 | 13 | 3.5 | 40 |
| 31 | 20 | --- | 15 | 6.0 | --- | 49 | --- | 29 | --- | 9.9 | 4.9 | --- |
| TOTAL | 369.0 | 1047 | 1208 | 265.8 | 5201.0 | 1266 | 2012 | 2854 | 530.6 | 327.2 | 193.7 | 1054.1 |
| MEAN | 11.9 | 34.9 | 39.0 | 8.57 | 186 | 40.8 | 67.1 | 92.1 | 17.7 | 10.6 | 6.25 | 35.1 |
| MAX | 80 | 128 | 68 | 14 | 900 | 80 | 157 | 343 | 33 | 28 | 16 | 76 |
| MIN | 2.5 | 12 | 15 | 6.0 | 6.0 | 25 | 37 | 27 | 9.6 | 4.2 | 3.3 | 4.6 |
| CFSM | .36 | 1.06 | 1.18 | .26 | 5.64 | 1.24 | 2.03 | 2.79 | .54 | .32 | .19 | 1.06 |
| IN. | .42 | 1.18 | 1.36 | .30 | 5.86 | 1.43 | 2.27 | 3.22 | .60 | .37 | .22 | 1.19 |

CAL YR 1980 TOTAL 14439.2 MEAN 39.5 MAX 662 MIN 2.5 CFSM 1.20 IN 16.28
WTR YR 1981 TOTAL 16328.4 MEAN 44.7 MAX 900 MIN 2.5 CFSM 1.36 IN 18.41

## 01417000 EAST BRANCH DELAWARE RIVER AT DOWNSVILLE, NY

LOCATION.--Lat 42°04'30", long 74°58'36", Delaware County, Hydrologic Unit 02040102, on left bank 0.5 mi (0.8 km) downstream from Downsville Dam, at downstream end of outlet channel of Pepacton Reservoir, and 1.0 mi (1.6 km) east of Downsville.

DRAINAGE AREA.--371 mi$^2$ (961 km$^2$).

PERIOD OF RECORD.--July 1941 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,094.92 ft (333.731 m) Board of Water Supply, City of New York datum. Prior to Sept. 26, 1941, nonrecording gage, and Sept. 26, 1941, to June 27, 1955, water-stage recorder, at site 0.8 mi (1.3 km) downstream at datum 7.03 ft (2.143 m) lower.

REMARKS.--Records good. Subsequent to September 1954, entire flow from drainage area controlled by Pepacton Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply (see Reservoirs in Delaware River Basin). Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,900 ft$^3$/s (677 m$^3$/s) Nov. 26, 1950, gage height, 14.52 ft (4.426 m), site and datum then in use, from rating curve extended above 12,000 ft$^3$/s (340 m$^3$/s); minimum, 0.3 ft$^3$/s (0.008 m$^3$/s) Oct. 11, 1954; minimum daily, 0.6 ft$^3$/s (0.017 m$^3$/s) Oct. 10, 1954; minimum gage height, 1.39 ft (0.424 m) Jan. 17, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 9, 1903, reached a stage of about 16 ft or 5 m (at former datum).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 697 ft$^3$/s (19.7 m$^3$/s) Oct. 16, gage height, 3.87 ft (1.180 m); minimum daily, 6.2 ft$^3$/s (0.176 m$^3$/s) Mar. 16, 17, 19-26, 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 292 | 647 | 6.9 | 82 | 54 | 7.3 | 6.9 | 18 | 19 | 45 | 74 | 73 |
| 2 | 286 | 647 | 7.1 | 78 | 30 | 7.3 | 6.6 | 18 | 19 | 47 | 73 | 73 |
| 3 | 292 | 647 | 7.1 | 76 | 7.1 | 7.3 | 6.4 | 18 | 19 | 43 | 72 | 73 |
| 4 | 292 | 647 | 6.9 | 102 | 6.6 | 7.1 | 6.4 | 18 | 19 | 71 | 72 | 73 |
| 5 | 286 | 647 | 6.9 | 126 | 6.6 | 7.1 | 6.9 | 18 | 19 | 46 | 72 | 73 |
| 6 | 292 | 635 | 6.9 | 100 | 6.6 | 7.1 | 6.9 | 18 | 19 | 45 | 72 | 73 |
| 7 | 292 | 635 | 6.9 | 100 | 6.9 | 7.1 | 12 | 18 | 19 | 72 | 72 | 73 |
| 8 | 365 | 624 | 6.9 | 123 | 7.1 | 6.9 | 18 | 18 | 19 | 87 | 72 | 73 |
| 9 | 436 | 624 | 7.1 | 120 | 6.9 | 6.9 | 18 | 19 | 19 | 108 | 72 | 72 |
| 10 | 436 | 635 | 6.9 | 123 | 6.6 | 6.6 | 18 | 19 | 19 | 94 | 73 | 72 |
| 11 | 436 | 624 | 6.9 | 126 | 16 | 6.4 | 18 | 20 | 47 | 71 | 73 | 72 |
| 12 | 436 | 635 | 6.9 | 90 | 8.9 | 6.4 | 18 | 21 | 74 | 87 | 87 | 72 |
| 13 | 436 | 624 | 6.9 | 48 | 7.6 | 6.4 | 18 | 21 | 54 | 104 | 102 | 72 |
| 14 | 436 | 624 | 6.9 | 48 | 7.6 | 6.4 | 18 | 21 | 31 | 91 | 101 | 72 |
| 15 | 436 | 589 | 6.6 | 50 | 7.6 | 6.4 | 18 | 21 | 18 | 73 | 102 | 72 |
| 16 | 555 | 555 | 6.9 | 47 | 7.3 | 6.2 | 17 | 22 | 18 | 81 | 101 | 72 |
| 17 | 659 | 555 | 59 | 46 | 7.6 | 6.2 | 18 | 21 | 18 | 99 | 86 | 72 |
| 18 | 659 | 402 | 85 | 46 | 7.3 | 6.4 | 18 | 21 | 46 | 99 | 71 | 72 |
| 19 | 659 | 298 | 50 | 43 | 7.1 | 6.2 | 18 | 21 | 73 | 103 | 70 | 71 |
| 20 | 659 | 402 | 51 | 48 | 7.8 | 6.2 | 18 | 21 | 42 | 61 | 73 | 71 |
| 21 | 659 | 513 | 74 | 51 | 7.8 | 6.2 | 17 | 21 | 18 | 18 | 73 | 73 |
| 22 | 659 | 337 | 120 | 48 | 7.8 | 6.2 | 18 | 21 | 18 | 45 | 73 | 73 |
| 23 | 483 | 247 | 117 | 48 | 7.8 | 6.2 | 18 | 21 | 18 | 73 | 73 | 73 |
| 24 | 143 | 177 | 111 | 47 | 8.1 | 6.2 | 18 | 21 | 18 | 74 | 74 | 72 |
| 25 | 19 | 6.9 | 120 | 47 | 7.8 | 6.2 | 18 | 21 | 46 | 74 | 73 | 72 |
| 26 | 18 | 6.6 | 87 | 50 | 7.6 | 6.2 | 18 | 21 | 73 | 74 | 73 | 72 |
| 27 | 18 | 6.6 | 51 | 59 | 7.6 | 6.4 | 18 | 20 | 49 | 74 | 73 | 73 |
| 28 | 42 | 6.6 | 51 | 59 | 7.3 | 6.2 | 18 | 20 | 19 | 74 | 73 | 72 |
| 29 | 212 | 6.6 | 54 | 53 | --- | 6.2 | 18 | 20 | 18 | 74 | 73 | 72 |
| 30 | 493 | 6.6 | 68 | 51 | --- | 6.4 | 18 | 19 | 22 | 74 | 73 | 70 |
| 31 | 589 | --- | 82 | 54 | --- | 6.4 | --- | 19 | --- | 74 | 73 | --- |
| TOTAL | 11975 | 13009.9 | 1290.7 | 2189 | 285.0 | 202.7 | 464.1 | 616 | 910 | 2255 | 2394 | 2168 |
| MEAN | 386 | 434 | 41.6 | 70.6 | 10.2 | 6.54 | 15.5 | 19.9 | 30.3 | 72.7 | 77.2 | 72.3 |
| MAX | 659 | 647 | 120 | 126 | 54 | 7.3 | 18 | 22 | 74 | 108 | 102 | 73 |
| MIN | 18 | 6.6 | 6.6 | 43 | 6.6 | 6.2 | 6.4 | 18 | 18 | 18 | 70 | 70 |

CAL YR 1980 TOTAL 71821.6 MEAN 196 MAX 2000 MIN 6.6
WTR YR 1981 TOTAL 37759.4 MEAN 103 MAX 659 MIN 6.2

## 01417500 EAST BRANCH DELAWARE RIVER AT HARVARD, NY

LOCATION.--Lat 42°01'28", long 75°07'10", Delaware County, Hydrologic Unit 02040102, on right bank 800 ft (244 m) downstream from Baxter Brook, and 1,100 ft (335 m) downstream from highway bridge at Harvard. Water-quality sampling site at discharge station.

DRAINAGE AREA.--457 $mi^2$ (1,184 $km^2$).

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1934 to June 1967, November 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,007.41 ft (307.059 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 12, 1958, water-stage recorder 1,100 ft (335 m) upstream at datum 0.65 ft (0.198 m) higher.

REMARKS.--Records good except those for winter periods, which are poor. Subsequent to September 1954, entire flow from 371 $mi^2$ (961 $km^2$) of drainage area controlled by Pepacton Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River Basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,400 $ft^3/s$ (889 $m^3/s$) Sept. 22, 1938, gage height, 16.93 ft (5.160 m) site and datum then in use, from rating curve extended above 10,000 $ft^3/s$ (283 $m^3/s$) on basis of slope-area measurement at gage height 15.58 ft (4.749 m); minimum, 7.2 $ft^3/s$ (0.20 $m^3/s$) Oct. 13, 1954, gage height 1.63 ft (0.497 m); minimum daily 7.6 $ft^3/s$ (0.22 $m^3/s$) Oct. 13, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,250 $ft^3/s$ (234 $m^3/s$) Feb. 11, gage height, 9.28 ft (2.829 m); minimum discharge, 49 $ft^3/s$ (1.39 $m^3/s$) Mar. 19, 21, gage height 1.51 ft (0.460 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 311 | 704 | 240 | 130 | 80 | 286 | 104 | 320 | 93 | 66 | 92 | 82 |
| 2 | 312 | 698 | 239 | 120 | 1000 | 245 | 194 | 293 | 87 | 97 | 90 | 81 |
| 3 | 314 | 690 | 335 | 110 | 1700 | 211 | 204 | 257 | 88 | 79 | 89 | 84 |
| 4 | 313 | 684 | 312 | 150 | 1020 | 180 | 204 | 222 | 97 | 95 | 87 | 82 |
| 5 | 310 | 678 | 278 | 190 | 645 | 171 | 222 | 197 | 88 | 109 | 87 | 81 |
| 6 | 308 | 673 | 257 | 170 | 505 | 153 | 234 | 180 | 80 | 77 | 86 | 82 |
| 7 | 310 | 669 | 227 | 160 | 393 | 139 | 204 | 162 | 76 | 88 | 85 | 89 |
| 8 | 328 | 666 | 213 | 200 | 320 | 131 | 197 | 144 | 72 | 95 | 88 | 95 |
| 9 | 434 | 673 | 212 | 210 | 276 | 120 | 197 | 131 | 74 | 114 | 87 | 140 |
| 10 | 439 | 692 | 204 | 210 | 237 | 113 | 204 | 120 | 71 | 130 | 84 | 107 |
| 11 | 441 | 678 | 180 | 200 | 2230 | 108 | 180 | 174 | 67 | 98 | 85 | 102 |
| 12 | 440 | 675 | 162 | 180 | 1980 | 104 | 171 | 642 | 95 | 90 | 87 | 97 |
| 13 | 439 | 670 | 159 | 120 | 823 | 104 | 156 | 673 | 108 | 109 | 104 | 93 |
| 14 | 439 | 666 | 130 | 110 | 530 | 102 | 168 | 521 | 93 | 118 | 109 | 91 |
| 15 | 440 | 654 | 120 | 110 | 386 | 93 | 190 | 459 | 99 | 95 | 110 | 140 |
| 16 | 476 | 605 | 120 | 110 | 334 | 95 | 168 | 835 | 80 | 87 | 128 | 115 |
| 17 | 628 | 609 | 120 | 100 | 345 | 81 | 174 | 619 | 72 | 98 | 117 | 107 |
| 18 | 627 | 570 | 244 | 100 | 438 | 79 | 177 | 469 | 67 | 108 | 92 | 99 |
| 19 | 625 | 345 | 164 | 90 | 637 | 79 | 162 | 370 | 95 | 107 | 85 | 100 |
| 20 | 632 | 414 | 160 | 92 | 1380 | 79 | 153 | 303 | 108 | 129 | 82 | 97 |
| 21 | 630 | 549 | 170 | 96 | 1260 | 74 | 144 | 249 | 82 | 98 | 83 | 93 |
| 22 | 631 | 530 | 210 | 92 | 835 | 74 | 136 | 205 | 109 | 64 | 82 | 97 |
| 23 | 575 | 239 | 190 | 90 | 632 | 72 | 144 | 172 | 142 | 80 | 82 | 118 |
| 24 | 289 | 511 | 160 | 88 | 652 | 70 | 184 | 150 | 115 | 90 | 84 | 155 |
| 25 | 116 | 605 | 180 | 86 | 530 | 68 | 171 | 134 | 105 | 90 | 85 | 143 |
| 26 | 423 | 441 | 140 | 88 | 442 | 65 | 162 | 125 | 135 | 91 | 81 | 130 |
| 27 | 260 | 339 | 120 | 94 | 367 | 65 | 156 | 117 | 136 | 100 | 80 | 124 |
| 28 | 196 | 319 | 110 | 94 | 320 | 65 | 150 | 109 | 99 | 96 | 79 | 137 |
| 29 | 214 | 333 | 110 | 80 | --- | 62 | 197 | 107 | 77 | 104 | 79 | 122 |
| 30 | 532 | 276 | 110 | 78 | --- | 67 | 352 | 111 | 71 | 101 | 79 | 115 |
| 31 | 613 | --- | 140 | 80 | --- | 91 | --- | 102 | --- | 95 | 83 | --- |
| TOTAL | 13045 | 16855 | 5716 | 3828 | 20297 | 3446 | 5459 | 8672 | 2781 | 2998 | 2771 | 3198 |
| MEAN | 421 | 562 | 184 | 123 | 725 | 111 | 182 | 280 | 92.7 | 96.7 | 89.4 | 107 |
| MAX | 632 | 704 | 335 | 210 | 2230 | 286 | 352 | 835 | 142 | 130 | 128 | 155 |
| MIN | 116 | 239 | 110 | 78 | 80 | 62 | 104 | 102 | 67 | 64 | 79 | 81 |

CAL YR 1980 TOTAL 112308 MEAN 307 MAX 2250 MIN 74
WTR YR 1981 TOTAL 89066 MEAN 244 MAX 2230 MIN 62

## 01417500 EAST BRANCH DELAWARE RIVER AT HARVARD, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: June 1978 to current year.

INSTRUMENTATION.--Temperature recorder since June 1978.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1978 and 1981), 28.0°C June 30, 1981; minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 28.0°C June 30; minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 11.5 | 9.5 | 10.0 | 7.5 | 6.0 | 7.0 | 5.5 | 4.0 | 4.5 | .0 | .0 | .0 |
| 2 | 9.5 | 9.0 | 9.5 | 7.5 | 6.5 | 7.0 | 6.5 | 4.5 | 5.5 | .0 | .0 | .0 |
| 3 | 9.5 | 8.0 | 8.5 | 8.0 | 6.0 | 7.0 | 5.5 | 2.0 | 3.5 | .0 | .0 | .0 |
| 4 | 9.0 | 7.5 | 8.5 | 8.0 | 7.5 | 8.0 | 2.0 | 1.0 | 1.5 | .5 | .0 | .0 |
| 5 | 9.5 | 7.5 | 8.5 | 8.0 | 6.5 | 7.5 | 2.0 | .5 | 1.0 | .0 | .0 | .0 |
| 6 | 9.5 | 7.5 | 8.5 | 8.0 | 6.0 | 7.0 | 2.0 | 1.0 | 1.5 | .0 | .0 | .0 |
| 7 | 9.0 | 7.5 | 8.0 | 9.0 | 7.5 | 8.0 | 1.5 | 1.0 | 1.5 | .0 | .0 | .0 |
| 8 | 10.0 | 7.5 | 8.5 | 9.0 | 7.5 | 8.5 | 4.0 | 1.5 | 2.0 | .0 | .0 | .0 |
| 9 | 9.5 | 7.5 | 8.5 | 7.5 | 6.5 | 7.0 | 4.5 | 3.5 | 4.0 | .5 | .0 | .0 |
| 10 | 8.5 | 6.0 | 7.5 | 7.5 | 6.0 | 7.5 | 3.5 | 3.0 | 3.5 | .0 | .0 | .0 |
| 11 | 9.0 | 8.0 | 8.5 | 6.5 | 5.5 | 6.0 | 3.0 | .5 | 1.5 | .0 | .0 | .0 |
| 12 | 8.0 | 7.5 | 7.5 | 7.0 | 6.0 | 6.5 | 1.0 | .5 | 1.0 | 1.0 | .0 | .5 |
| 13 | 7.5 | 6.5 | 7.0 | 8.0 | 6.5 | 7.0 | 2.0 | 1.0 | 1.5 | 2.0 | .0 | .5 |
| 14 | 8.0 | 6.0 | 7.0 | 8.0 | 7.0 | 7.5 | 1.0 | .5 | .5 | .0 | .0 | .0 |
| 15 | 7.5 | 6.5 | 7.0 | 7.5 | 7.0 | 7.5 | 2.0 | .0 | 1.0 | .0 | .0 | .0 |
| 16 | 8.0 | 6.5 | 7.5 | 7.0 | 6.0 | 6.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 17 | 9.5 | 7.5 | 8.5 | 6.5 | 4.5 | 6.0 | 1.0 | .0 | .0 | .0 | .0 | .0 |
| 18 | 9.0 | 8.0 | 8.5 | 5.5 | 3.5 | 4.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 19 | 9.5 | 7.5 | 8.5 | 5.0 | 4.5 | 4.5 | .5 | .0 | .0 | .0 | .0 | .0 |
| 20 | 8.0 | 7.0 | 7.5 | 6.0 | 4.5 | 5.5 | .5 | .0 | .0 | .0 | .0 | .0 |
| 21 | 7.5 | 7.0 | 7.5 | 6.5 | 5.0 | 6.0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 22 | 7.5 | 6.5 | 7.0 | 7.0 | 5.5 | 6.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 23 | 8.0 | 6.0 | 7.0 | 5.5 | 4.0 | 4.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 24 | 7.5 | 5.5 | 6.5 | 5.5 | 4.5 | 5.0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 25 | 9.5 | 7.0 | 8.0 | 4.5 | 4.0 | 4.0 | 1.0 | .0 | .0 | .0 | .0 | .0 |
| 26 | 8.0 | 7.5 | 7.5 | 4.0 | 3.0 | 3.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 27 | 8.5 | 7.0 | 7.5 | 4.0 | 3.0 | 3.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 28 | 7.5 | 7.0 | 7.5 | 4.5 | 4.0 | 4.0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 29 | 7.0 | 6.0 | 6.5 | 4.5 | 4.0 | 4.0 | .0 | .0 | .0 | .5 | .0 | .0 |
| 30 | 7.0 | 5.5 | 6.5 | 4.5 | 3.5 | 4.0 | .5 | .0 | .0 | .0 | .0 | .0 |
| 31 | 7.5 | 5.5 | 6.5 | --- | --- | --- | .0 | .0 | .0 | .5 | .0 | .0 |
| MONTH | 11.5 | 5.5 | 8.0 | 9.0 | 3.0 | 6.0 | 6.5 | .0 | 1.0 | 2.0 | .0 | .0 |

## 01417500 EAST BRANCH DELAWARE RIVER AT HARVARD, NY--Continued

### TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | .0 | .0 | .0 | 3.5 | 2.5 | 3.0 | 11.5 | 8.5 | 10.0 | 11.5 | 9.0 | 10.5 |
| 2 | .0 | .0 | .0 | 3.5 | 2.0 | 2.5 | 11.0 | 8.5 | 9.5 | 11.5 | 9.5 | 10.0 |
| 3 | .0 | .0 | .0 | 2.0 | .5 | 1.5 | 11.5 | 7.5 | 9.5 | 14.0 | 8.0 | 11.0 |
| 4 | .0 | .0 | .0 | 1.5 | .0 | 1.0 | 11.5 | 9.5 | 10.5 | 15.5 | 9.5 | 12.5 |
| 5 | .5 | .0 | .0 | 2.0 | 1.5 | 2.0 | 11.5 | 10.0 | 11.0 | 16.5 | 11.0 | 14.0 |
| 6 | .0 | .0 | .0 | 3.5 | .5 | 2.0 | 10.0 | 7.0 | 8.5 | 15.0 | 11.5 | 13.0 |
| 7 | .0 | .0 | .0 | 2.0 | 1.0 | 1.5 | 10.5 | 6.0 | 8.0 | 14.0 | 9.0 | 11.5 |
| 8 | .0 | .0 | .0 | 2.5 | 1.5 | 2.0 | 12.5 | 7.5 | 10.0 | 15.5 | 9.5 | 12.5 |
| 9 | .0 | .0 | .0 | 4.5 | 2.0 | 3.5 | 11.0 | 9.5 | 10.0 | 15.5 | 10.5 | 13.0 |
| 10 | .0 | .0 | .0 | 5.5 | 4.0 | 4.5 | 13.0 | 8.0 | 10.5 | 17.5 | 12.0 | 14.5 |
| 11 | 8.0 | .0 | 1.0 | 6.0 | 4.0 | 5.0 | 11.0 | 9.0 | 10.0 | 15.5 | 13.0 | 14.5 |
| 12 | .5 | .0 | .0 | 5.5 | 3.5 | 4.5 | 12.5 | 10.0 | 11.0 | 13.0 | 11.0 | 12.5 |
| 13 | .5 | .0 | .0 | 6.5 | 4.0 | 5.0 | 13.5 | 9.5 | 11.0 | 12.5 | 9.5 | 11.0 |
| 14 | 1.5 | .0 | .5 | 4.5 | 2.0 | 3.5 | 10.5 | 8.0 | 9.0 | 14.5 | 9.5 | 12.0 |
| 15 | 2.0 | .0 | 1.0 | 5.5 | 2.0 | 3.5 | 10.5 | 7.0 | 8.5 | 14.5 | 12.0 | 12.5 |
| 16 | 3.5 | .5 | 2.0 | 5.0 | 3.0 | 4.5 | 11.5 | 7.5 | 9.5 | 12.0 | 10.0 | 11.0 |
| 17 | 4.5 | 2.0 | 3.0 | 3.5 | 2.5 | 2.5 | 9.5 | 8.5 | 9.0 | 13.0 | 9.5 | 11.0 |
| 18 | 5.5 | 3.0 | 4.0 | 4.0 | 1.5 | 3.0 | 14.0 | 9.5 | 11.5 | 12.5 | 9.0 | 11.0 |
| 19 | 5.0 | 3.0 | 4.0 | 3.0 | 1.5 | 2.0 | 12.5 | 9.5 | 11.0 | 12.5 | 9.5 | 11.0 |
| 20 | 5.0 | 4.5 | 4.5 | 2.5 | 1.5 | 2.0 | 11.5 | 8.5 | 10.0 | 14.5 | 9.0 | 11.5 |
| 21 | 5.0 | 4.0 | 5.0 | 3.5 | 1.5 | 2.0 | 10.5 | 7.5 | 9.0 | 15.5 | 10.0 | 13.0 |
| 22 | 6.5 | 5.0 | 6.0 | 3.5 | 1.5 | 2.5 | 11.5 | 7.5 | 9.5 | 17.0 | 11.0 | 14.0 |
| 23 | 6.0 | 5.5 | 6.0 | 6.5 | 2.5 | 4.5 | 12.0 | 8.0 | 9.0 | 17.5 | 12.0 | 14.5 |
| 24 | 7.0 | 5.5 | 6.0 | 8.5 | 4.5 | 6.0 | 10.0 | 8.0 | 9.5 | 18.0 | 12.5 | 15.0 |
| 25 | 5.5 | 3.5 | 4.5 | 9.5 | 5.0 | 6.5 | 9.5 | 8.0 | 8.0 | 19.0 | 14.0 | 16.5 |
| 26 | 3.5 | 3.0 | 3.5 | 9.5 | 6.5 | 8.0 | 10.5 | 7.5 | 9.0 | 20.5 | 16.0 | 18.0 |
| 27 | 5.0 | 2.0 | 3.5 | 7.5 | 6.0 | 7.0 | 13.0 | 8.5 | 10.5 | 20.5 | 16.0 | 18.0 |
| 28 | 3.5 | 2.0 | 2.5 | 11.0 | 5.5 | 8.0 | 12.0 | 9.5 | 10.5 | 19.0 | 16.5 | 17.5 |
| 29 | --- | --- | --- | 12.0 | 7.0 | 10.0 | 12.5 | 11.0 | 11.5 | 19.0 | 16.0 | 17.0 |
| 30 | --- | --- | --- | 10.5 | 9.5 | 9.5 | 11.5 | 10.0 | 11.0 | 20.0 | 16.0 | 18.0 |
| 31 | --- | --- | --- | 11.5 | 9.0 | 10.0 | --- | --- | --- | 20.0 | 17.0 | 18.0 |
| MONTH | 8.0 | .0 | 2.0 | 12.0 | .0 | 4.5 | 14.0 | 6.0 | 10.0 | 20.5 | 8.0 | 13.5 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 20.5 | 15.5 | 18.0 | 23.5 | 19.5 | 21.0 | 23.0 | 18.0 | 20.5 | 19.0 | 16.0 | 17.0 |
| 2 | 17.0 | 14.5 | 15.5 | 23.0 | 19.5 | 21.0 | 22.5 | 19.0 | 20.5 | 18.0 | 17.0 | 17.5 |
| 3 | 14.5 | 14.0 | 14.5 | 23.5 | 20.0 | 21.5 | 22.5 | 19.0 | 20.5 | 17.5 | 16.0 | 16.5 |
| 4 | 20.0 | 14.0 | 16.5 | 22.0 | 20.0 | 20.5 | 24.0 | 19.5 | 21.5 | 16.0 | 14.5 | 15.5 |
| 5 | 21.5 | 16.5 | 18.5 | 21.0 | 18.5 | 19.5 | 21.5 | 19.5 | 20.5 | 16.5 | 14.0 | 15.0 |
| 6 | 21.0 | 17.0 | 19.0 | 22.5 | 17.5 | 20.0 | 22.0 | 17.0 | 19.5 | 16.0 | 15.0 | 15.0 |
| 7 | 18.5 | 15.5 | 16.5 | 26.0 | 20.0 | 22.5 | 23.5 | 18.0 | 20.5 | 16.5 | 14.5 | 15.5 |
| 8 | 21.0 | 14.0 | 17.5 | 26.0 | 21.0 | 23.5 | 21.0 | 17.5 | 19.0 | 16.0 | 15.5 | 16.0 |
| 9 | 21.0 | 17.5 | 19.0 | 25.5 | 21.5 | 23.5 | 23.0 | 17.0 | 19.5 | 16.5 | 14.5 | 15.5 |
| 10 | 19.5 | 16.0 | 18.0 | 25.5 | 21.0 | 23.0 | 24.0 | 19.0 | 21.0 | 19.0 | 14.0 | 16.0 |
| 11 | 21.5 | 16.0 | 18.5 | 24.5 | 18.0 | 21.5 | 23.5 | 20.5 | 21.5 | 19.5 | 15.0 | 17.0 |
| 12 | 21.5 | 17.0 | 19.0 | 25.0 | 20.0 | 22.5 | 23.0 | 19.5 | 21.0 | 19.0 | 16.5 | 17.5 |
| 13 | 23.0 | 17.5 | 20.0 | 24.0 | 21.0 | 23.0 | 21.0 | 18.0 | 19.5 | 20.0 | 16.0 | 17.5 |
| 14 | 20.5 | 16.0 | 17.5 | 22.0 | 17.0 | 20.5 | 21.0 | 17.5 | 19.0 | 19.5 | 16.5 | 18.0 |
| 15 | 20.5 | 15.0 | 17.5 | 22.0 | 18.0 | 20.5 | 19.0 | 17.5 | 18.0 | 18.5 | 16.5 | 17.0 |
| 16 | 25.0 | 19.0 | 22.0 | 23.5 | 18.0 | 20.5 | 21.0 | 16.0 | 17.5 | 17.0 | 15.5 | 16.0 |
| 17 | 23.5 | 20.5 | 22.0 | 23.0 | 18.0 | 21.0 | 18.0 | 14.0 | 16.0 | 16.5 | 15.0 | 15.5 |
| 18 | 24.5 | 17.5 | 21.0 | 21.5 | 17.5 | 19.5 | 20.0 | 15.0 | 17.5 | 16.0 | 14.0 | 15.0 |
| 19 | 24.5 | 19.0 | 22.0 | 21.5 | 17.5 | 19.5 | 21.0 | 16.0 | 18.5 | 15.5 | 14.0 | 14.5 |
| 20 | 22.0 | 19.0 | 20.5 | 20.0 | 16.5 | 17.5 | 22.0 | 17.5 | 19.5 | 18.5 | 13.5 | 14.5 |
| 21 | 19.5 | 17.5 | 18.5 | 20.0 | 16.5 | 18.0 | 21.0 | 17.5 | 20.0 | 17.0 | 14.0 | 15.0 |
| 22 | 18.5 | 13.5 | 18.0 | 22.5 | 17.5 | 20.0 | 20.0 | 17.5 | 18.5 | 15.5 | 14.0 | 14.0 |
| 23 | 20.5 | 11.5 | 16.5 | 23.5 | 17.5 | 20.5 | 21.0 | 16.0 | 18.5 | 13.5 | 12.0 | 12.5 |
| 24 | 20.0 | 14.5 | 17.5 | 22.5 | 18.5 | 20.5 | 20.5 | 16.5 | 17.5 | 11.5 | 10.5 | 11.0 |
| 25 | 19.0 | 17.0 | 18.0 | 22.5 | 19.0 | 20.5 | 19.5 | 16.0 | 17.5 | 14.0 | 10.0 | 12.0 |
| 26 | 17.5 | 14.5 | 15.5 | 20.5 | 18.0 | 19.0 | 21.5 | 16.0 | 18.5 | 16.0 | 12.0 | 13.5 |
| 27 | 19.0 | 13.0 | 16.0 | 23.5 | 17.5 | 20.0 | 21.5 | 17.0 | 19.0 | 16.0 | 12.0 | 14.5 |
| 28 | 21.5 | 14.5 | 18.0 | 20.5 | 17.0 | 18.0 | 21.5 | 17.0 | 19.0 | 15.0 | 12.0 | 13.5 |
| 29 | 22.0 | 16.5 | 19.5 | 22.5 | 16.5 | 17.0 | 19.0 | 17.0 | 18.0 | 12.5 | 10.5 | 11.5 |
| 30 | 28.0 | 18.5 | 21.5 | 20.5 | 14.5 | 18.0 | 18.5 | 16.5 | 17.5 | 11.5 | 10.0 | 10.5 |
| 31 | --- | --- | --- | 22.5 | 16.5 | 19.0 | 17.5 | 17.0 | 17.0 | --- | --- | --- |
| MONTH | 28.0 | 11.5 | 18.5 | 26.0 | 14.5 | 20.5 | 24.0 | 14.0 | 19.0 | 20.0 | 10.0 | 15.0 |

## 01420000 LITTLE BEAVER KILL NEAR LIVINGSTON MANOR, NY

LOCATION.--Lat 41°52'23", long 74°47'52", Sullivan County, Hydrologic Unit 02040102, on right bank 100 ft (30 m) downstream from private bridge, 0.2 mi (0.3 km) west from interchange 97 on State Highway 17, 2.5 (4.0 km) southeast of Livingston Manor, and 3 mi (5 km) upstream from Cattail Brook.

DRAINAGE AREA.--19.8 mi² (51.3 km²).

PERIOD OF RECORD.--July 1924 to September 1981 (discontinued).

REVISED RECORDS.--WSP 1302: 1930(M), 1933(M), 1936-37(M), 1942-46(M). WSP 1432: 1928(M).

GAGE.--Water-stage recorder. Concrete control since November 1933. Datum of gage is 1,496.69 ft (456.191 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 9, 1939, nonrecording gage.

REMARKS.--Records fair except those for winter periods, which are poor. Some diversion from Lily Pond for village of Liberty water supply.

AVERAGE DISCHARGE.--57 years, 44.9 ft³/s (1.272 m³/s), 30.79 in/yr (782 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,420 ft³/s (96.9 m³/s) Aug. 26, 1928, gage height, 8.7 ft (2.65 m), from floodmarks, from rating curve extended above 1,700 ft³/s (48.1 m³/s); minimum, 0.9 ft³/s (0.025 m³/s) July 10, 1962; minimum gage height, 1.23 ft (0.375 m) Aug. 1, 3, 5, 1936.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 730 ft³/s (20.7 m³/s) and maximum (*):

| Date | Time | Discharge (ft³/s) | Discharge (m³/s) | Gage height (ft) | Gage height (m) | Date | Time | Discharge (ft³/s) | Discharge (m³/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 20 | 1400 | 1,940 | 54.9 | 5.99 | 1.826 | May 12 | 0445 | *2,000 | 55.5 | *6.05 | 1.844 |

Minimum discharge, 1.5 ft³/s (0.04 m³/s) Oct. 2, 6-11, gage height, 1.35 ft (0.411 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.8 | 4.8 | 27 | 11 | 7.2 | 51 | 33 | 52 | 16 | 7.5 | 6.3 | 5.2 |
| 2 | 2.1 | 4.6 | 33 | 10 | 110 | 45 | 68 | 43 | 15 | 13 | 5.8 | 4.7 |
| 3 | 2.7 | 4.1 | 69 | 10 | 70 | 41 | 38 | 36 | 17 | 12 | 11 | 4.5 |
| 4 | 3.2 | 4.1 | 45 | 9.6 | 58 | 37 | 29 | 32 | 19 | 11 | 14 | 4.6 |
| 5 | 2.3 | 4.1 | 32 | 9.2 | 50 | 33 | 41 | 29 | 15 | 35 | 11 | 4.2 |
| 6 | 1.8 | 3.8 | 26 | 9.0 | 43 | 30 | 52 | 27 | 14 | 29 | 8.7 | 4.9 |
| 7 | 1.5 | 4.3 | 25 | 9.0 | 36 | 27 | 38 | 25 | 12 | 16 | 6.9 | 5.0 |
| 8 | 1.5 | 6.1 | 27 | 8.8 | 33 | 26 | 32 | 23 | 11 | 11 | 7.5 | 7.9 |
| 9 | 1.5 | 8.4 | 35 | 8.8 | 29 | 25 | 36 | 23 | 14 | 9.3 | 6.9 | 14 |
| 10 | 1.5 | 9.7 | 30 | 8.6 | 27 | 24 | 43 | 21 | 11 | 8.1 | 6.3 | 7.2 |
| 11 | 2.2 | 7.8 | 25 | 8.6 | 290 | 22 | 34 | 257 | 10 | 6.9 | 5.8 | 5.3 |
| 12 | 3.7 | 6.1 | 22 | 8.4 | 305 | 22 | 32 | 1140 | 9.3 | 6.9 | 5.8 | 4.5 |
| 13 | 2.7 | 5.6 | 23 | 8.4 | 120 | 22 | 29 | 298 | 11 | 5.8 | 14 | 4.2 |
| 14 | 2.2 | 5.6 | 23 | 8.2 | 80 | 21 | 65 | 146 | 19 | 5.8 | 8.1 | 3.9 |
| 15 | 2.2 | 5.3 | 22 | 8.0 | 66 | 21 | 66 | 128 | 31 | 5.3 | 5.3 | 3.9 |
| 16 | 2.2 | 4.6 | 20 | 8.0 | 55 | 19 | 47 | 271 | 19 | 4.8 | 8.7 | 4.9 |
| 17 | 2.2 | 4.4 | 19 | 7.8 | 63 | 19 | 44 | 124 | 14 | 4.8 | 8.1 | 5.2 |
| 18 | 2.7 | 5.6 | 19 | 7.8 | 118 | 19 | 41 | 84 | 11 | 4.8 | 6.3 | 5.1 |
| 19 | 3.7 | 6.8 | 18 | 7.8 | 179 | 18 | 35 | 65 | 9.3 | 4.8 | 5.8 | 4.7 |
| 20 | 3.2 | 6.0 | 17 | 7.8 | 1010 | 17 | 32 | 52 | 9.3 | 24 | 5.3 | 4.5 |
| 21 | 2.7 | 5.6 | 16 | 7.6 | 417 | 17 | 29 | 44 | 15 | 41 | 4.8 | 4.1 |
| 22 | 2.7 | 5.9 | 15 | 7.6 | 216 | 16 | 27 | 38 | 28 | 19 | 4.4 | 4.9 |
| 23 | 2.2 | 5.6 | 15 | 7.6 | 148 | 15 | 40 | 33 | 25 | 11 | 4.8 | 5.6 |
| 24 | 2.2 | 60 | 15 | 7.4 | 266 | 14 | 65 | 28 | 16 | 8.7 | 4.4 | 5.4 |
| 25 | 22 | 101 | 14 | 7.4 | 126 | 14 | 47 | 26 | 14 | 7.5 | 4.4 | 4.8 |
| 26 | 40 | 55 | 13 | 7.4 | 90 | 14 | 39 | 22 | 13 | 8.1 | 3.9 | 4.1 |
| 27 | 14 | 35 | 13 | 7.4 | 71 | 14 | 34 | 20 | 11 | 14 | 3.5 | 5.0 |
| 28 | 9.0 | 37 | 12 | 7.2 | 58 | 14 | 35 | 19 | 9.3 | 9.3 | 3.6 | 5.1 |
| 29 | 7.2 | 46 | 12 | 7.2 | --- | 13 | 73 | 19 | 8.1 | 11 | 3.3 | 4.1 |
| 30 | 6.1 | 32 | 11 | 7.2 | --- | 16 | 73 | 19 | 7.5 | 8.1 | 3.9 | 3.9 |
| 31 | 5.6 | --- | 11 | 7.2 | --- | 21 | --- | 19 | --- | 6.3 | 6.0 | --- |
| TOTAL | 160.6 | 494.9 | 704 | 256.0 | 4141.2 | 707 | 1297 | 3163 | 433.8 | 369.8 | 204.6 | 155.4 |
| MEAN | 5.18 | 16.5 | 22.7 | 8.26 | 148 | 22.8 | 43.2 | 102 | 14.5 | 11.9 | 6.60 | 5.18 |
| MAX | 40 | 101 | 69 | 11 | 1010 | 51 | 73 | 1140 | 31 | 41 | 14 | 14 |
| MIN | 1.5 | 3.8 | 11 | 7.2 | 7.2 | 13 | 27 | 19 | 7.5 | 4.8 | 3.3 | 3.9 |
| CFSM | .26 | .83 | 1.15 | .42 | 7.48 | 1.15 | 2.18 | 5.15 | .73 | .60 | .33 | .26 |
| IN. | .30 | .93 | 1.32 | .48 | 7.78 | 1.33 | 2.44 | 5.94 | .81 | .69 | .38 | .29 |

CAL YR 1980 TOTAL 10619.2 MEAN 29.0 MAX 1200 MIN 1.5 CFSM 1.47 IN 19.95
WTR YR 1981 TOTAL 12087.3 MEAN 33.1 MAX 1140 MIN 1.5 CFSM 1.67 IN 22.71

## 01420500 BEAVER KILL AT COOKS FALLS, NY

**LOCATION.**--Lat 41°56'47", long 74°58'48", Delaware County, Hydrologic Unit 02040102, on left bank 66 ft (20 m) downstream from road bridge in Cooks Falls, and 5.5 mi (8.8 km) downstream from Willowemoc Creek.

**DRAINAGE AREA.**--241 mi² (624 km²).

**PERIOD OF RECORD.**--July 1913 to current year.

**REVISED RECORDS.**--WSP 521: Drainage area. WSP 781: 1933(M). WSP 891: 1936-39(M). WSP 1202: 1950. WSP 1232: 1950(M).

**GAGE.**--Water-stage recorder. Datum of gage is 1,151.70 ft (351.038 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1933, nonrecording gage at site 125 ft (38 m) upstream at same datum.

**REMARKS.**--Records good except those for winter periods, which are poor. Slight diversion at headwaters into Cooper Lake for water supply of Kingston.

**AVERAGE DISCHARGE.**--67 years, 559 ft³/s (15.83 m³/s), 31.50 in/yr (800 mm/yr).

**EXTREMES FOR PERIOD OF RECORD.**--Maximum discharge, 31,600 ft³/s (895 m³/s) Mar. 31, 1951, gage height, 16.02 ft (4.883 m), from rating curve extended above 13,000 ft³/s (368 m³/s) on basis of slope-area measurement at gage height 15.52 ft (4.730 m); minimum, 16 ft³/s (0.45 m³/s) Nov. 22, 23, 1964.

**EXTREMES FOR CURRENT YEAR.**--Peak discharges above base of 4,700 ft³/s (130 m³/s) and maximum (*):

| Date | Time | Discharge (ft³/s) | Discharge (m³/s) | Gage height (ft) | Gage height (m) | Date | Time | Discharge (ft³/s) | Discharge (m³/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 2 | 1700 | 4,860 | 138 | 7.60 | 2.316 | Feb. 20 | 1945 | *16,400 | 464 | *12.44 | 3.792 |
| Feb. 11 | 2245 | 11,400 | 323 | 10.75 | 3.277 | May 12 | 0815 | 14,200 | 402 | 11.72 | 3.572 |

Minimum discharge, 37 ft³/s (1.05 m³/s) Oct. 25; gage height, 0.70 ft (0.213 m).

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 41 | 88 | 432 | 130 | 74 | 917 | 348 | 667 | 265 | 133 | 111 | 78 |
| 2 | 43 | 84 | 446 | 120 | 2400 | 791 | 1090 | 596 | 240 | 152 | 104 | 71 |
| 3 | 45 | 81 | 822 | 120 | 2100 | 691 | 769 | 536 | 243 | 158 | 100 | 69 |
| 4 | 46 | 79 | 500 | 120 | 900 | 597 | 624 | 486 | 273 | 149 | 120 | 67 |
| 5 | 46 | 78 | 430 | 110 | 720 | 560 | 697 | 448 | 232 | 217 | 115 | 64 |
| 6 | 48 | 76 | 400 | 110 | 600 | 507 | 911 | 421 | 208 | 247 | 106 | 64 |
| 7 | 44 | 76 | 370 | 110 | 520 | 464 | 716 | 397 | 190 | 187 | 96 | 68 |
| 8 | 43 | 81 | 370 | 110 | 450 | 427 | 630 | 354 | 179 | 158 | 111 | 79 |
| 9 | 42 | 90 | 502 | 100 | 380 | 400 | 614 | 330 | 196 | 138 | 110 | 175 |
| 10 | 42 | 121 | 498 | 100 | 330 | 377 | 698 | 313 | 190 | 130 | 97 | 132 |
| 11 | 46 | 118 | 380 | 100 | 3850 | 358 | 595 | 1590 | 172 | 121 | 91 | 99 |
| 12 | 48 | 95 | 340 | 98 | 5550 | 341 | 557 | 10900 | 158 | 121 | 93 | 86 |
| 13 | 47 | 97 | 300 | 96 | 1700 | 333 | 505 | 4320 | 158 | 110 | 90 | 81 |
| 14 | 43 | 95 | 280 | 94 | 1200 | 326 | 659 | 2220 | 194 | 106 | 88 | 78 |
| 15 | 40 | 95 | 230 | 92 | 960 | 290 | 876 | 1760 | 350 | 99 | 84 | 80 |
| 16 | 43 | 94 | 312 | 90 | 880 | 270 | 676 | 3280 | 263 | 93 | 118 | 81 |
| 17 | 43 | 86 | 318 | 88 | 935 | 250 | 637 | 1910 | 204 | 91 | 110 | 83 |
| 18 | 45 | 88 | 230 | 86 | 1350 | 240 | 618 | 1370 | 177 | 87 | 99 | 83 |
| 19 | 49 | 90 | 210 | 84 | 2050 | 230 | 546 | 1090 | 159 | 84 | 85 | 80 |
| 20 | 47 | 90 | 190 | 84 | 9250 | 220 | 501 | 890 | 154 | 136 | 79 | 76 |
| 21 | 46 | 88 | 180 | 82 | 6240 | 210 | 459 | 742 | 161 | 341 | 74 | 73 |
| 22 | 43 | 88 | 170 | 82 | 3130 | 210 | 421 | 634 | 221 | 206 | 72 | 78 |
| 23 | 40 | 86 | 170 | 80 | 2130 | 210 | 464 | 548 | 247 | 151 | 71 | 111 |
| 24 | 38 | 418 | 160 | 80 | 3080 | 214 | 745 | 492 | 196 | 126 | 71 | 126 |
| 25 | 63 | 1420 | 160 | 80 | 2070 | 209 | 619 | 442 | 192 | 115 | 73 | 127 |
| 26 | 408 | 768 | 150 | 78 | 1580 | 201 | 533 | 384 | 196 | 113 | 70 | 111 |
| 27 | 209 | 517 | 150 | 78 | 1250 | 202 | 483 | 350 | 177 | 154 | 64 | 101 |
| 28 | 143 | 498 | 140 | 76 | 1050 | 200 | 452 | 327 | 159 | 141 | 69 | 108 |
| 29 | 119 | 657 | 140 | 74 | --- | 196 | 623 | 314 | 149 | 142 | 60 | 111 |
| 30 | 103 | 517 | 130 | 74 | --- | 219 | 843 | 296 | 141 | 152 | 62 | 101 |
| 31 | 95 | --- | 130 | 74 | --- | 345 | --- | 301 | --- | 126 | 80 | --- |
| TOTAL | 2198 | 6859 | 9240 | 2900 | 56729 | 11005 | 18909 | 38708 | 6044 | 4484 | 2773 | 2741 |
| MEAN | 70.9 | 229 | 298 | 93.5 | 2026 | 355 | 630 | 1249 | 201 | 145 | 89.5 | 91.4 |
| MAX | 408 | 1420 | 822 | 130 | 9250 | 917 | 1090 | 10900 | 350 | 341 | 120 | 175 |
| MIN | 38 | 76 | 130 | 74 | 74 | 196 | 348 | 296 | 141 | 84 | 60 | 64 |
| CFSM | .29 | .95 | 1.24 | .39 | 8.41 | 1.47 | 2.61 | 5.18 | .83 | .60 | .37 | .38 |
| IN. | .34 | 1.06 | 1.43 | .45 | 8.76 | 1.70 | 2.92 | 5.97 | .93 | .69 | .43 | .42 |

CAL YR 1980 TOTAL 132416 MEAN 362 MAX 9440 MIN 38 CFSM 1.50 IN 20.44
WTR YR 1981 TOTAL 162590 MEAN 445 MAX 10900 MIN 38 CFSM 1.85 IN 25.10

## 01421000 EAST BRANCH DELAWARE RIVER AT FISHS EDDY, NY

LOCATION.--Lat 41°58'23", long 75°10'28", Delaware County, Hydrologic Unit 02040102, on left bank 3,000 ft (914 m) upstream from bridge on County highway 28 at Fishs Eddy, 0.6 mi (1.0 km) upstream from Fish Creek, 4.2 mi (6.8 km) downstream from Beaver Kill, and 11 mi (18 km) upstream from the confluence of East and West Branches near Hancock. Water-quality sampling site at discharge station.

DRAINAGE AREA.--783 mi$^2$ (2,028 km$^2$).

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1912 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 756: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 955.96 ft (291.377 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 27, 1928, nonrecording gage and Sept. 28, 1928 to Nov. 1, 1967, water-stage recorder at site 3,000 ft (914 m) downstream at datum 5.0 ft (1.52 m) lower.

REMARKS.--Records fair except those for winter periods, which are poor. Subsequent to September 1954, entire flow from 371 mi$^2$ (961 km$^2$) of drainage area controlled by Pepacton Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 53,300 ft$^3$/s (1,510 m$^3$/s) Aug. 24, 1933, gage height, 20.60 ft (6.279 m) at former site and datum, from rating curve extended above 22,000 ft$^3$/s (623 m$^3$/s); minimum, 52 ft$^3$/s (1.47 m$^3$/s) July 23, 1964, gage height, 1.16 ft (0.354 m) at former site and datum; minimum daily, 68 ft$^3$/s (1.93 m$^3$/s) Aug. 29, 1949.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 9, 1903, reached a stage of 23.6 ft (7.19 m) at former site and datum, from description obtained in April 1939, from local residents who had experienced the flood (discharge, about 70,000 ft$^3$/s or 1,980 m$^3$/s, from rating curve extended above 22,000 ft$^3$/s or 623 m$^3$/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21,200 ft$^3$/s (600 m$^3$/s) Feb. 11; maximum gage height, 13.72 ft (4.182 m) Feb. 2 (ice jam); minimum discharge, 140 ft$^3$/s (3.96 m$^3$/s) Aug. 29, gage height, 2.77 ft (0.844 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 378 | 804 | 863 | 360 | 220 | 1420 | 542 | 1170 | 464 | 268 | 233 | 170 |
| 2 | 381 | 794 | 871 | 350 | 3500 | 1230 | 1260 | 1060 | 414 | 284 | 218 | 162 |
| 3 | 387 | 774 | 1370 | 350 | 3000 | 1090 | 1110 | 961 | 407 | 301 | 214 | 162 |
| 4 | 384 | 765 | 1000 | 340 | 1700 | 948 | 962 | 867 | 457 | 290 | 218 | 155 |
| 5 | 381 | 755 | 960 | 330 | 1200 | 898 | 971 | 798 | 407 | 349 | 223 | 151 |
| 6 | 381 | 746 | 920 | 320 | 1000 | 818 | 1260 | 746 | 355 | 428 | 209 | 155 |
| 7 | 381 | 746 | 900 | 320 | 840 | 759 | 1050 | 702 | 318 | 336 | 196 | 170 |
| 8 | 379 | 746 | 863 | 310 | 760 | 706 | 948 | 639 | 295 | 307 | 209 | 200 |
| 9 | 490 | 755 | 902 | 300 | 700 | 662 | 909 | 592 | 313 | 295 | 223 | 400 |
| 10 | 501 | 824 | 905 | 300 | 660 | 633 | 1000 | 561 | 318 | 295 | 200 | 318 |
| 11 | 508 | 814 | 807 | 290 | 5760 | 608 | 881 | 1140 | 284 | 263 | 196 | 247 |
| 12 | 509 | 794 | 700 | 290 | 10500 | 584 | 831 | 11200 | 279 | 238 | 200 | 218 |
| 13 | 509 | 774 | 660 | 280 | 3000 | 572 | 773 | 6070 | 301 | 242 | 200 | 204 |
| 14 | 509 | 774 | 600 | 280 | 2100 | 561 | 833 | 3270 | 330 | 253 | 209 | 196 |
| 15 | 502 | 765 | 500 | 270 | 1700 | 514 | 1160 | 2560 | 539 | 223 | 209 | 238 |
| 16 | 509 | 709 | 520 | 260 | 1400 | 500 | 948 | 4900 | 494 | 183 | 268 | 228 |
| 17 | 682 | 709 | 556 | 260 | 1490 | 450 | 906 | 3190 | 374 | 204 | 258 | 214 |
| 18 | 691 | 691 | 525 | 260 | 1950 | 410 | 904 | 2310 | 324 | 214 | 214 | 204 |
| 19 | 691 | 495 | 500 | 250 | 3030 | 400 | 820 | 1850 | 313 | 209 | 183 | 204 |
| 20 | 700 | 530 | 460 | 250 | 10200 | 390 | 764 | 1520 | 324 | 274 | 170 | 200 |
| 21 | 691 | 639 | 450 | 250 | 9760 | 370 | 721 | 1260 | 313 | 545 | 162 | 196 |
| 22 | 682 | 673 | 440 | 250 | 5030 | 444 | 679 | 1080 | 407 | 368 | 158 | 200 |
| 23 | 664 | 384 | 430 | 250 | 3440 | 396 | 699 | 918 | 525 | 274 | 158 | 268 |
| 24 | 390 | 896 | 420 | 240 | 4320 | 393 | 1010 | 813 | 428 | 258 | 158 | 330 |
| 25 | 276 | 2410 | 410 | 240 | 3200 | 384 | 926 | 739 | 394 | 238 | 166 | 330 |
| 26 | 1030 | 1530 | 400 | 240 | 2460 | 375 | 832 | 653 | 428 | 233 | 158 | 290 |
| 27 | 614 | 1100 | 390 | 230 | 1950 | 371 | 777 | 602 | 407 | 274 | 147 | 268 |
| 28 | 437 | 1020 | 390 | 230 | 1630 | 370 | 742 | 559 | 349 | 284 | 147 | 284 |
| 29 | 395 | 1170 | 380 | 230 | --- | 361 | 917 | 539 | 295 | 279 | 143 | 274 |
| 30 | 638 | 992 | 370 | 230 | --- | 378 | 1340 | 517 | 274 | 295 | 143 | 258 |
| 31 | 736 | --- | 360 | 220 | --- | 505 | --- | 502 | --- | 258 | 162 | --- |
| TOTAL | 16406 | 25578 | 19822 | 8580 | 86500 | 18500 | 27475 | 54288 | 11130 | 8762 | 5952 | 6894 |
| MEAN | 529 | 853 | 639 | 277 | 3089 | 597 | 916 | 1751 | 371 | 283 | 192 | 230 |
| MAX | 1030 | 2410 | 1370 | 360 | 10500 | 1420 | 1340 | 11200 | 539 | 545 | 268 | 400 |
| MIN | 276 | 384 | 360 | 220 | 220 | 361 | 542 | 502 | 274 | 183 | 143 | 151 |

CAL YR 1980 TOTAL 286310 MEAN 782 MAX 14400 MIN 164
WTR YR 1981 TOTAL 289887 MEAN 794 MAX 11200 MIN 143

## 01421000 EAST BRANCH DELAWARE RIVER AT FISHS EDDY, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1958-59, 1968 to current year.
CHEMICAL DATA: 1958-59 (d), 1970 (b), 1971-74 (d), 1975 (c).
MINOR ELEMENTS DATA: 1971-74 (a).
ORGANIC DATA: OC--1974 (a), 1975 (c).
NUTRIENT DATA: 1971-75 (d).
BIOLOGICAL DATA:
Bacteria--1971 (c), 1973-75 (c).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: November 1967 to current year.

INSTRUMENTATION.--Temperature recorder since November 1967.

REMARKS.--No record Feb. 2 to Apr. 9, July 14-16, Aug. 12-19, 26, 27, Sept. 25-30, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1968-75, 1978, 1980-81), 31.5°C Aug. 2, 1975; minimum (water years 1968-76, 1978-79, 1981), freezing point on many days during winter periods, except water year 1978.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 27.0°C July 8; minimum, freezing point on many days during winter period.

### TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 14.5 | 11.5 | 12.5 | 6.5 | 6.0 | 6.5 | 5.0 | 3.5 | 4.0 | .5 | .5 | .5 |
| 2 | 13.0 | 11.5 | 12.0 | 6.5 | 5.5 | 6.0 | 6.0 | 4.5 | 5.0 | .5 | .5 | .5 |
| 3 | 11.5 | 10.5 | 10.5 | 7.0 | 5.5 | 6.5 | 5.0 | .5 | 2.5 | .5 | .5 | .5 |
| 4 | 11.0 | 10.0 | 10.5 | 7.5 | 6.5 | 7.0 | .5 | .5 | .5 | .5 | .0 | .0 |
| 5 | 11.5 | 8.5 | 9.5 | 7.5 | 6.0 | 7.0 | .5 | .5 | .5 | .0 | .0 | .0 |
| 6 | 12.0 | 8.0 | 10.0 | 6.5 | 5.5 | 6.0 | 1.0 | .5 | .5 | .0 | .0 | .0 |
| 7 | 10.5 | 9.0 | 10.0 | 9.0 | 6.5 | 8.0 | 1.0 | .5 | .5 | .0 | .0 | .0 |
| 8 | 12.0 | 8.5 | 10.0 | 9.5 | 7.0 | 8.5 | 3.0 | 1.0 | 2.0 | .0 | .0 | .0 |
| 9 | 12.0 | 9.0 | 10.5 | 6.5 | 6.0 | 6.0 | 3.5 | 3.0 | 3.5 | .0 | .0 | .0 |
| 10 | 10.5 | 7.0 | 8.5 | 6.5 | 5.0 | 6.5 | 3.5 | 2.5 | 3.0 | .0 | .0 | .0 |
| 11 | 10.5 | 8.5 | 9.0 | 5.0 | 4.5 | 4.5 | 2.5 | .0 | 1.0 | .0 | .0 | .0 |
| 12 | 10.0 | 7.0 | 8.5 | 5.0 | 4.5 | 4.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 13 | 8.0 | 6.5 | 7.0 | 7.0 | 5.0 | 6.0 | .5 | .0 | .5 | .0 | .0 | .0 |
| 14 | 8.5 | 6.5 | 7.5 | 7.0 | 6.0 | 6.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 15 | 7.5 | 7.0 | 7.0 | 7.0 | 6.0 | 6.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 16 | 8.5 | 7.5 | 8.0 | 6.0 | 4.5 | 5.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 17 | 10.5 | 8.0 | 10.0 | 4.5 | 2.5 | 4.0 | .5 | .0 | .0 | .0 | .0 | .0 |
| 18 | 10.0 | 8.5 | 9.5 | 3.0 | 2.5 | 2.5 | .5 | .5 | .5 | .0 | .0 | .0 |
| 19 | 10.5 | 8.0 | 9.0 | 3.5 | 3.0 | 3.0 | .5 | .5 | .5 | .0 | .0 | .0 |
| 20 | 8.0 | 7.0 | 7.5 | 5.0 | 3.0 | 3.5 | .5 | .5 | .5 | .0 | .0 | .0 |
| 21 | 7.5 | 7.0 | 7.5 | 4.5 | 3.5 | 4.0 | .5 | .5 | .5 | .0 | .0 | .0 |
| 22 | 7.5 | 6.0 | 7.0 | 5.5 | 4.5 | 5.0 | .5 | .5 | .5 | .0 | .0 | .0 |
| 23 | 8.0 | 5.5 | 6.5 | 4.0 | 3.0 | 3.5 | .5 | .5 | .5 | .0 | .0 | .0 |
| 24 | 8.0 | 5.5 | 7.0 | 4.0 | 3.5 | 3.5 | .5 | .5 | .5 | .0 | .0 | .0 |
| 25 | 9.5 | 7.0 | 8.0 | 4.0 | 3.5 | 4.0 | .5 | .5 | .5 | .0 | .0 | .0 |
| 26 | 7.5 | 6.5 | 7.0 | 3.5 | 2.5 | 3.0 | .5 | .5 | .5 | .0 | .0 | .0 |
| 27 | 8.0 | 6.0 | 7.0 | 3.0 | 2.0 | 2.5 | .5 | .5 | .5 | .0 | .0 | .0 |
| 28 | 7.0 | 6.0 | 6.5 | 3.5 | 3.0 | 3.0 | .5 | .5 | .5 | .0 | .0 | .0 |
| 29 | 6.0 | 5.5 | 6.0 | 3.5 | 3.5 | 3.5 | .5 | .0 | .5 | .0 | .0 | .0 |
| 30 | 6.0 | 5.5 | 5.5 | 3.5 | 3.0 | 3.5 | .5 | .0 | .0 | .0 | .0 | .0 |
| 31 | 7.5 | 5.0 | 6.5 | --- | --- | --- | .5 | .5 | .5 | .0 | .0 | .0 |
| MONTH | 14.5 | 5.0 | 8.5 | 9.5 | 2.0 | 5.0 | 6.0 | .0 | 1.0 | .5 | .0 | .0 |

## 01421000 EAST BRANCH DELAWARE RIVER AT FISHS EDDY, NY--Continued

### TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | .0 | .0 | .0 | | | | --- | --- | --- | 11.5 | 8.5 | 10.0 |
| 2 | --- | --- | --- | | | | --- | --- | --- | 11.5 | 9.5 | 10.0 |
| 3 | --- | --- | --- | | | | --- | --- | --- | 14.0 | 8.0 | 11.0 |
| 4 | --- | --- | --- | | | | --- | --- | --- | 15.5 | 9.5 | 12.5 |
| 5 | --- | --- | --- | | | | --- | --- | --- | 16.5 | 11.5 | 14.5 |
| 6 | --- | --- | --- | | | | --- | --- | --- | 15.0 | 11.0 | 13.5 |
| 7 | --- | --- | --- | | | | --- | --- | --- | 14.0 | 8.5 | 11.0 |
| 8 | --- | --- | --- | | | | --- | --- | --- | 15.5 | 9.5 | 12.5 |
| 9 | --- | --- | --- | | | | --- | --- | --- | 15.5 | 10.5 | 13.0 |
| 10 | --- | --- | --- | | | | 11.5 | 7.0 | 9.5 | 17.5 | 11.5 | 14.5 |
| 11 | --- | --- | --- | | | | 10.5 | 8.5 | 9.5 | 16.0 | 12.5 | 14.5 |
| 12 | --- | --- | --- | | | | 12.0 | 9.0 | 10.5 | 12.5 | 11.0 | 11.5 |
| 13 | --- | --- | --- | | | | 12.5 | 9.0 | 10.5 | 12.0 | 9.5 | 11.0 |
| 14 | --- | --- | --- | | | | 10.0 | 6.5 | 8.0 | 13.5 | 9.5 | 12.0 |
| 15 | --- | --- | --- | | | | 9.0 | 5.5 | 7.0 | 14.5 | 12.5 | 13.0 |
| 16 | --- | --- | --- | | | | 10.5 | 5.0 | 8.0 | 12.5 | 11.0 | 11.5 |
| 17 | --- | --- | --- | | | | 8.5 | 7.5 | 8.0 | 13.0 | 10.0 | 11.0 |
| 18 | --- | --- | --- | | | | 13.5 | 8.5 | 10.5 | 12.5 | 9.0 | 10.5 |
| 19 | --- | --- | --- | | | | 11.5 | 9.0 | 10.5 | 12.0 | 8.5 | 10.5 |
| 20 | --- | --- | --- | | | | 10.5 | 7.5 | 9.5 | 14.0 | 9.0 | 11.5 |
| 21 | --- | --- | --- | | | | 10.0 | 5.5 | 7.5 | 15.0 | 10.5 | 12.5 |
| 22 | --- | --- | --- | | | | 11.0 | 5.5 | 8.5 | 17.0 | 12.0 | 14.5 |
| 23 | --- | --- | --- | | | | 9.0 | 8.0 | 8.0 | 17.5 | 12.5 | 15.0 |
| 24 | --- | --- | --- | | | | 9.5 | 7.5 | 8.5 | 18.0 | 13.0 | 15.5 |
| 25 | --- | --- | --- | | | | 9.0 | 7.5 | 8.0 | 19.0 | 14.5 | 17.0 |
| 26 | --- | --- | --- | | | | 10.0 | 7.0 | 8.5 | 20.5 | 16.5 | 18.5 |
| 27 | --- | --- | --- | | | | 12.5 | 8.0 | 10.5 | 20.5 | 17.0 | 18.5 |
| 28 | --- | --- | --- | | | | 12.0 | 9.5 | 10.5 | 19.5 | 17.0 | 18.0 |
| 29 | --- | --- | --- | | | | 12.0 | 11.0 | 11.5 | 19.5 | 16.5 | 18.0 |
| 30 | --- | --- | --- | | | | 11.5 | 10.0 | 11.0 | 20.5 | 17.5 | 19.0 |
| 31 | --- | --- | --- | | | | --- | --- | --- | 20.5 | 17.5 | 19.0 |
| MONTH | .0 | .0 | .0 | | | | 13.5 | 5.0 | 9.0 | 20.5 | 8.0 | 13.5 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 20.5 | 15.0 | 17.5 | 23.0 | 20.5 | 21.5 | 24.5 | 21.0 | 22.5 | 21.0 | 17.5 | 19.0 |
| 2 | 18.5 | 15.0 | 16.5 | 23.0 | 20.0 | 21.5 | 26.0 | 21.0 | 24.0 | 20.5 | 18.5 | 19.5 |
| 3 | 15.0 | 14.5 | 14.5 | 24.0 | 20.5 | 22.5 | 23.5 | 20.5 | 22.5 | 19.5 | 16.5 | 17.5 |
| 4 | 19.5 | 14.5 | 17.0 | 23.0 | 21.0 | 21.5 | 24.5 | 19.5 | 22.0 | 18.0 | 16.0 | 16.5 |
| 5 | 21.5 | 16.5 | 19.0 | 22.5 | 20.0 | 21.0 | 25.5 | 20.0 | 23.0 | 17.0 | 15.0 | 16.0 |
| 6 | 22.0 | 18.0 | 20.0 | 24.0 | 20.0 | 22.0 | 22.5 | 20.0 | 21.5 | 17.0 | 15.0 | 16.0 |
| 7 | 20.0 | 17.0 | 18.0 | 26.0 | 21.0 | 23.0 | 24.0 | 20.0 | 22.0 | 16.0 | 13.5 | 14.5 |
| 8 | 20.5 | 15.0 | 17.5 | 27.0 | 23.5 | 25.0 | 25.5 | 21.0 | 23.5 | 15.5 | 12.5 | 14.0 |
| 9 | 21.5 | 18.5 | 19.5 | 26.5 | 22.0 | 24.0 | 25.5 | 22.0 | 23.5 | 15.0 | 14.0 | 14.0 |
| 10 | 19.5 | 17.0 | 18.5 | 26.0 | 22.0 | 24.5 | 24.5 | 19.0 | 22.5 | 14.5 | 12.0 | 13.0 |
| 11 | 21.5 | 16.0 | 18.5 | 26.0 | 22.5 | 24.5 | 21.0 | 16.0 | 17.5 | 12.0 | 10.0 | 10.5 |
| 12 | 21.5 | 17.5 | 19.5 | 25.0 | 20.5 | 23.0 | --- | --- | --- | 14.0 | 9.0 | 10.5 |
| 13 | 23.5 | 18.5 | 21.0 | 24.5 | 20.0 | 22.0 | --- | --- | --- | 14.0 | 12.0 | 13.0 |
| 14 | 22.0 | 17.5 | 19.5 | --- | --- | --- | --- | --- | --- | 16.0 | 12.0 | 13.5 |
| 15 | 21.0 | 16.5 | 18.5 | --- | --- | --- | --- | --- | --- | 16.0 | 13.0 | 14.5 |
| 16 | 25.0 | 19.5 | 22.0 | --- | --- | --- | --- | --- | --- | 13.0 | 9.5 | 11.0 |
| 17 | 24.0 | 21.0 | 22.0 | 25.0 | 20.0 | 22.5 | --- | --- | --- | 12.5 | 9.0 | 10.5 |
| 18 | 24.0 | 18.0 | 21.0 | 25.5 | 20.5 | 23.0 | --- | --- | --- | 10.5 | 8.5 | 9.0 |
| 19 | 24.0 | 19.5 | 22.0 | 24.5 | 21.0 | 23.0 | --- | --- | --- | 10.0 | 8.5 | 9.0 |
| 20 | 22.5 | 21.0 | 21.5 | 23.0 | 21.0 | 21.5 | 23.5 | 19.0 | 20.5 | 10.0 | 8.5 | 9.0 |
| 21 | 21.0 | 21.0 | 20.0 | 22.5 | 20.5 | 21.5 | 23.5 | 18.5 | 20.5 | 10.0 | 8.0 | 8.5 |
| 22 | 20.5 | 19.0 | 19.5 | 24.0 | 20.0 | 22.0 | 21.0 | 18.0 | 19.5 | 10.5 | 9.5 | 10.0 |
| 23 | 19.0 | 19.0 | 17.5 | 24.0 | 19.0 | 21.5 | 23.0 | 19.0 | 20.5 | 10.5 | 10.5 | 10.5 |
| 24 | 20.5 | 15.5 | 18.0 | 23.0 | 19.0 | 21.5 | 22.0 | 18.5 | 19.5 | 11.0 | 9.5 | 10.0 |
| 25 | 20.0 | 18.0 | 19.0 | 22.5 | 20.0 | 21.5 | 22.5 | 18.5 | 20.0 | --- | --- | --- |
| 26 | 19.0 | 15.0 | 16.5 | 20.5 | 19.0 | 19.5 | --- | --- | --- | --- | --- | --- |
| 27 | 20.0 | 13.5 | 16.5 | 19.5 | 17.0 | 18.5 | --- | --- | --- | --- | --- | --- |
| 28 | 22.5 | 15.5 | 19.0 | 22.0 | 16.0 | 19.0 | 23.0 | 19.5 | 21.0 | --- | --- | --- |
| 29 | 22.5 | 17.5 | 20.0 | 24.0 | 18.0 | 21.5 | 21.0 | 19.5 | 20.0 | --- | --- | --- |
| 30 | 24.5 | 19.5 | 22.0 | 25.0 | 20.0 | 22.5 | 21.0 | 18.5 | 19.5 | --- | --- | --- |
| 31 | --- | --- | --- | 25.0 | 20.5 | 23.0 | 21.5 | 17.0 | 19.0 | --- | --- | --- |
| MONTH | 25.0 | 13.5 | 19.0 | 27.0 | 16.0 | 22.0 | 26.0 | 16.0 | 21.0 | 21.0 | 8.0 | 13.0 |

## 01423000 WEST BRANCH DELAWARE RIVER AT WALTON, NY

LOCATION.--Lat 42°09'58", long 75°08'26", Delaware County, Hydrologic Unit 02040101, on left bank at west end of fairgrounds at Walton, and 100 ft (30 m) downstream from West Brook.

DRAINAGE AREA.--331 mi$^2$ (856 km$^2$).

PERIOD OF RECORD.--October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,190.30 ft (362.803 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--31 years, 588 ft$^3$/s (16.65 m$^3$/s), 24.13 in/yr (613 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,900 ft$^3$/s (507 m$^3$/s) Feb. 11, 1981, gage height, 14.34 ft (4.371 m); minimum, 12 ft$^3$/s (0.34 m$^3$/s) Sept. 15, Nov. 22, 1964; minimum gage height, 1.86 ft (0.567 m) Nov. 22, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,600 ft$^3$/s (130 m$^3$/s) and maximum (*):

| Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) | Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 2 | 1515 | 5,930 | 168 | [a]11.07 | 3.374 | Feb. 11 | 2215 | *17,900 | 507 | *14.34 | 4.371 |

[a] Ice jam.

Minimum discharge, 35 ft$^3$/s (0.99 m$^3$/s) Aug. 31, minimum gage height, 2.37 ft (0.722 m) Oct. 10, 11, Aug. 31.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 47 | 201 | 666 | 160 | 100 | 1120 | 502 | 998 | 458 | 138 | 65 | 38 |
| 2 | 49 | 184 | 660 | 160 | 2800 | 941 | 907 | 881 | 352 | 136 | 60 | 38 |
| 3 | 54 | 167 | 900 | 150 | 2500 | 824 | 780 | 766 | 322 | 145 | 57 | 42 |
| 4 | 53 | 155 | 700 | 140 | 900 | 706 | 726 | 666 | 367 | 138 | 56 | 49 |
| 5 | 50 | 146 | 640 | 130 | 700 | 669 | 751 | 590 | 305 | 141 | 55 | 56 |
| 6 | 47 | 135 | 600 | 120 | 640 | 597 | 804 | 547 | 275 | 173 | 60 | 53 |
| 7 | 45 | 129 | 580 | 120 | 580 | 553 | 663 | 509 | 266 | 151 | 56 | 67 |
| 8 | 44 | 129 | 600 | 110 | 540 | 511 | 597 | 445 | 230 | 121 | 56 | 67 |
| 9 | 42 | 137 | 640 | 110 | 480 | 480 | 573 | 392 | 213 | 107 | 56 | 121 |
| 10 | 41 | 210 | 580 | 110 | 450 | 463 | 659 | 353 | 203 | 101 | 53 | 99 |
| 11 | 42 | 238 | 540 | 100 | 7000 | 453 | 554 | 435 | 203 | 93 | 51 | 77 |
| 12 | 42 | 205 | 500 | 100 | 9060 | 432 | 528 | 1700 | 188 | 85 | 51 | 67 |
| 13 | 43 | 193 | 470 | 100 | 2740 | 430 | 472 | 1830 | 213 | 80 | 48 | 61 |
| 14 | 45 | 213 | 420 | 100 | 1870 | 400 | 493 | 1380 | 291 | 76 | 46 | 68 |
| 15 | 44 | 221 | 350 | 96 | 1440 | 370 | 571 | 1300 | 383 | 72 | 47 | 253 |
| 16 | 43 | 200 | 400 | 96 | 1250 | 350 | 466 | 2330 | 308 | 69 | 57 | 176 |
| 17 | 42 | 180 | 370 | 96 | 1510 | 320 | 465 | 1600 | 266 | 65 | 61 | 123 |
| 18 | 44 | 170 | 330 | 90 | 1640 | 300 | 494 | 1260 | 239 | 63 | 54 | 105 |
| 19 | 50 | 207 | 290 | 90 | 1840 | 290 | 432 | 1040 | 205 | 60 | 48 | 102 |
| 20 | 50 | 197 | 260 | 90 | 3040 | 280 | 402 | 877 | 188 | 77 | 44 | 97 |
| 21 | 50 | 177 | 250 | 96 | 3620 | 270 | 376 | 732 | 263 | 141 | 41 | 90 |
| 22 | 49 | 195 | 250 | 96 | 2650 | 277 | 347 | 627 | 319 | 121 | 40 | 94 |
| 23 | 48 | 179 | 230 | 96 | 2040 | 265 | 365 | 536 | 312 | 99 | 38 | 195 |
| 24 | 46 | 526 | 220 | 90 | 2350 | 272 | 551 | 462 | 250 | 81 | 42 | 466 |
| 25 | 168 | 1670 | 210 | 94 | 1750 | 268 | 544 | 413 | 224 | 70 | 43 | 455 |
| 26 | 1020 | 1080 | 200 | 100 | 1530 | 258 | 493 | 383 | 233 | 67 | 42 | 315 |
| 27 | 508 | 831 | 190 | 110 | 1280 | 272 | 454 | 341 | 219 | 81 | 40 | 263 |
| 28 | 378 | 914 | 190 | 100 | 1150 | 301 | 434 | 302 | 193 | 82 | 38 | 348 |
| 29 | 316 | 988 | 190 | 96 | --- | 283 | 784 | 383 | 166 | 81 | 36 | 308 |
| 30 | 259 | 757 | 180 | 94 | --- | 321 | 1300 | 478 | 151 | 82 | 36 | 247 |
| 31 | 225 | --- | 170 | 94 | --- | 492 | --- | 563 | --- | 73 | 37 | --- |
| TOTAL | 3984 | 10934 | 12776 | 3334 | 57450 | 13768 | 17487 | 25119 | 7805 | 3069 | 1514 | 4540 |
| MEAN | 129 | 364 | 412 | 108 | 2052 | 444 | 583 | 810 | 260 | 99.0 | 48.8 | 151 |
| MAX | 1020 | 1670 | 900 | 160 | 9060 | 1120 | 1300 | 2330 | 458 | 173 | 65 | 466 |
| MIN | 41 | 129 | 170 | 90 | 100 | 258 | 347 | 302 | 151 | 60 | 36 | 38 |
| CFSM | .39 | 1.10 | 1.25 | .33 | 6.20 | 1.34 | 1.76 | 2.45 | .79 | .30 | .15 | .46 |
| IN. | .45 | 1.23 | 1.44 | .37 | 6.46 | 1.55 | 1.97 | 2.82 | .88 | .34 | .17 | .51 |

CAL YR 1980 TOTAL 144789 MEAN 396 MAX 8220 MIN 31 CFSM 1.20 IN 16.27
WTR YR 1981 TOTAL 161780 MEAN 443 MAX 9060 MIN 36 CFSM 1.34 IN 18.18

## 01425000 WEST BRANCH DELAWARE RIVER AT STILESVILLE, NY

LOCATION.--Lat 42°04'29", long 75°23'47", Delaware County, Hydrologic Unit 02040101, on right bank at Stilesville, 0.5 mi (0.8 km) upstream from Cold Spring Creek, 1.4 mi (2.3 km) downstream from Cannonsville Dam, and 2.0 mi (3.2 km) northeast of Deposit. Water-quality sampling site at discharge station.

DRAINAGE AREA.--456 $mi^2$ (1,181 $km^2$).

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1952 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 992.23 ft (302.432 m) National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York). Prior to Oct. 1, 1964, at site 600 ft (183 m) downstream at datum 1.37 ft (0.418 m) higher.

REMARKS.--Records good above 2,000 $ft^3/s$ (56.6 $m^3/s$), poor below. Subsequent to October 1963, entire flow from 454 $mi^2$ (1,176 $km^2$) of drainage area controlled by Cannonsville Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply (see Reservoirs in Delaware River Basin). Remainder of flow (except for conservation releases and spill) impounded for release during period of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,500 $ft^3/s$ (496 $m^3/s$) Jan. 22, 1959, gage height, 9.01 ft (2.746 m), site and datum then in use; minimum daily 7.2 $ft^3/s$ (0.20 $m^3/s$) Feb. 8, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,430 $ft^3/s$ (40.5 $m^3/s$) Sept. 17, 18, gage height, 8.71 ft (2.655 m); minimum daily, 10 $ft^3/s$ (0.28 $m^3/s$) Dec. 14; minimum gage height, 2.40 ft (0.732 m) Dec. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1260 | 277 | 16 | 265 | 510 | 14 | 12 | 31 | 29 | 82 | 954 | 954 |
| 2 | 1240 | 340 | 13 | 265 | 262 | 13 | 12 | 30 | 29 | 92 | 580 | 941 |
| 3 | 1200 | 338 | 14 | 335 | 23 | 13 | 12 | 30 | 29 | 510 | 580 | 954 |
| 4 | 1210 | 370 | 14 | 345 | 12 | 12 | 12 | 29 | 30 | 478 | 670 | 994 |
| 5 | 1040 | 406 | 13 | 277 | 11 | 12 | 12 | 29 | 29 | 220 | 718 | 1010 |
| 6 | 1150 | 418 | 12 | 265 | 11 | 12 | 12 | 29 | 29 | 119 | 718 | 1120 |
| 7 | 1210 | 495 | 13 | 330 | 11 | 12 | 12 | 29 | 29 | 78 | 826 | 446 |
| 8 | 1220 | 348 | 13 | 345 | 11 | 12 | 11 | 28 | 29 | 170 | 706 | 320 |
| 9 | 1060 | 326 | 14 | 388 | 11 | 12 | 12 | 28 | 29 | 193 | 462 | 156 |
| 10 | 778 | 379 | 13 | 388 | 11 | 12 | 12 | 28 | 29 | 610 | 600 | 88 |
| 11 | 915 | 337 | 12 | 345 | 25 | 12 | 12 | 28 | 29 | 610 | 580 | 658 |
| 12 | 850 | 330 | 12 | 340 | 42 | 12 | 12 | 32 | 365 | 265 | 670 | 778 |
| 13 | 838 | 319 | 12 | 412 | 22 | 12 | 11 | 32 | 478 | 177 | 694 | 340 |
| 14 | 826 | 274 | 10 | 438 | 18 | 12 | 13 | 31 | 193 | 462 | 876 | 202 |
| 15 | 838 | 315 | 12 | 446 | 16 | 12 | 15 | 31 | 41 | 570 | 876 | 53 |
| 16 | 826 | 280 | 12 | 454 | 15 | 12 | 29 | 33 | 31 | 590 | 718 | 40 |
| 17 | 520 | 275 | 12 | 580 | 16 | 13 | 30 | 34 | 30 | 980 | 718 | 502 |
| 18 | 486 | 216 | 33 | 570 | 16 | 11 | 29 | 32 | 105 | 754 | 790 | 1080 |
| 19 | 560 | 288 | 207 | 530 | 19 | 11 | 29 | 32 | 259 | 360 | 814 | 1090 |
| 20 | 634 | 215 | 244 | 478 | 34 | 11 | 29 | 31 | 200 | 308 | 850 | 350 |
| 21 | 658 | 242 | 226 | 478 | 31 | 11 | 29 | 31 | 87 | 44 | 1040 | 308 |
| 22 | 622 | 239 | 268 | 462 | 22 | 11 | 29 | 31 | 82 | 29 | 1020 | 340 |
| 23 | 634 | 141 | 268 | 454 | 20 | 11 | 30 | 31 | 31 | 296 | 902 | 232 |
| 24 | 256 | 203 | 340 | 530 | 21 | 11 | 31 | 30 | 30 | 766 | 902 | 200 |
| 25 | 67 | 72 | 350 | 560 | 18 | 11 | 30 | 29 | 55 | 876 | 941 | 902 |
| 26 | 44 | 41 | 350 | 462 | 16 | 11 | 29 | 30 | 244 | 350 | 941 | 954 |
| 27 | 39 | 32 | 262 | 478 | 15 | 11 | 29 | 29 | 335 | 312 | 954 | 191 |
| 28 | 39 | 32 | 235 | 478 | 14 | 11 | 29 | 29 | 87 | 312 | 1040 | 125 |
| 29 | 86 | 32 | 193 | 540 | --- | 11 | 31 | 29 | 44 | 406 | 1040 | 105 |
| 30 | 265 | 31 | 250 | 520 | --- | 11 | 35 | 29 | 34 | 418 | 838 | 142 |
| 31 | 277 | --- | 265 | 502 | --- | 12 | --- | 30 | --- | 889 | 980 | --- |
| TOTAL | 21648 | 7611 | 3708 | 13260 | 1253 | 364 | 630 | 935 | 3051 | 12326 | 24998 | 15575 |
| MEAN | 698 | 254 | 120 | 428 | 44.8 | 11.7 | 21.0 | 30.2 | 102 | 398 | 806 | 519 |
| MAX | 1260 | 495 | 350 | 580 | 510 | 14 | 35 | 34 | 478 | 980 | 1040 | 1120 |
| MIN | 39 | 31 | 10 | 265 | 11 | 11 | 11 | 28 | 29 | 29 | 462 | 40 |

CAL YR 1980 TOTAL 205357 MEAN 561 MAX 2900 MIN 10
WTR YR 1981 TOTAL 105359 MEAN 289 MAX 1260 MIN 10

## 01425000 WEST BRANCH DELAWARE RIVER AT STILESVILLE, NY--Continued

### WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.
CHEMICAL DATA: 1959-60 (a) unpublished; 1969 (a); 1970 (a) unpublished; 1971, 1973 (b); 1974 (d); 1975 (b).
MINOR ELEMENTS DATA: 1971 (b).
NUTRIENT DATA: 1970 (a) unpublished; 1971, 1973 (b); 1974 (d); 1975 (b).
BIOLOGICAL DATA:
Bacteria--1973 (b), 1974 (d), 1975 (b).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1962 to current year.

INSTRUMENTATION.--Temperature recorder since October 1962.

REMARKS.--Water temperature is affected by release of water from upstream reservoir.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1963-78, 1980-81), 30.5°C July 2, 1963; minimum, freezing point on many days during winter periods, except 1969 and 1973.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 22.0°C on June 30; minimum, freezing point on several days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 16.5 | 15.0 | 15.5 | 9.0 | 8.0 | 8.5 | 7.0 | 4.0 | 5.5 | 2.5 | 2.0 | 2.5 |
| 2 | 16.0 | 15.5 | 15.5 | 9.0 | 8.0 | 8.5 | 9.0 | 5.0 | 6.5 | 2.5 | 1.5 | 2.0 |
| 3 | 16.5 | 15.5 | 16.0 | 10.0 | 8.5 | 9.0 | 5.5 | .0 | 1.5 | 2.5 | 1.5 | 2.0 |
| 4 | 16.0 | 16.0 | 16.0 | 9.5 | 8.5 | 9.0 | 1.5 | .0 | .5 | 2.0 | 1.5 | 1.5 |
| 5 | 17.0 | 16.0 | 16.0 | 9.0 | 8.0 | 8.5 | 2.0 | .5 | 1.0 | 3.0 | 1.5 | 2.0 |
| 6 | 17.0 | 16.0 | 16.5 | 9.0 | 8.0 | 8.5 | 2.5 | .5 | 1.0 | 2.5 | 1.5 | 2.0 |
| 7 | 16.5 | 16.0 | 16.5 | 9.5 | 8.5 | 9.0 | 2.5 | 1.0 | 2.0 | 2.5 | 1.5 | 2.0 |
| 8 | 17.0 | 16.0 | 16.5 | 9.0 | 8.0 | 8.5 | 5.0 | 2.5 | 3.5 | 2.0 | 1.5 | 1.5 |
| 9 | 17.0 | 16.0 | 16.5 | 8.5 | 7.5 | 8.0 | 5.0 | 3.0 | 4.0 | 3.0 | 1.5 | 2.0 |
| 10 | 17.0 | 15.5 | 16.0 | 8.0 | 7.0 | 8.0 | 4.0 | 2.0 | 3.0 | 2.5 | 1.5 | 2.0 |
| 11 | 16.5 | 16.0 | 16.0 | 7.5 | 6.5 | 7.0 | 3.0 | .5 | 1.0 | 2.5 | 1.5 | 1.5 |
| 12 | 16.0 | 15.5 | 15.5 | 7.0 | 6.5 | 6.5 | 1.5 | .5 | 1.0 | 2.5 | 1.5 | 2.0 |
| 13 | 15.5 | 15.0 | 15.0 | 8.5 | 6.5 | 7.5 | 2.5 | .5 | 1.5 | 2.5 | 1.5 | 2.0 |
| 14 | 15.5 | 14.5 | 15.0 | 7.5 | 7.0 | 7.0 | 1.0 | .0 | .5 | 2.5 | 1.5 | 2.0 |
| 15 | 15.0 | 14.5 | 15.0 | 7.0 | 6.5 | 7.0 | .5 | .0 | .0 | 2.5 | 2.0 | 2.5 |
| 16 | 15.0 | 14.5 | 15.0 | 7.0 | 5.5 | 6.5 | .5 | .5 | .5 | 2.5 | 2.0 | 2.5 |
| 17 | 15.5 | 14.0 | 14.5 | 6.5 | 4.0 | 5.5 | 1.0 | .5 | .5 | 2.0 | 1.5 | 2.0 |
| 18 | 14.5 | 13.5 | 14.0 | 5.5 | 4.0 | 5.0 | 1.0 | .0 | .5 | 2.5 | 2.0 | 2.0 |
| 19 | 14.5 | 13.5 | 13.5 | 5.5 | 3.5 | 5.0 | 2.0 | 1.0 | 1.5 | 3.0 | 2.0 | 2.5 |
| 20 | 13.5 | 13.0 | 13.5 | 6.5 | 5.5 | 6.0 | 2.0 | 1.0 | 2.0 | 3.0 | 2.0 | 2.0 |
| 21 | 13.5 | 13.0 | 13.0 | 6.5 | 4.0 | 5.5 | 2.5 | 1.0 | 2.0 | 3.0 | 1.5 | 2.0 |
| 22 | 13.5 | 13.0 | 13.0 | 6.0 | 5.0 | 5.5 | 3.0 | 1.5 | 2.0 | 2.5 | 1.5 | 2.0 |
| 23 | 14.0 | 12.5 | 13.0 | 5.5 | 3.5 | 4.5 | 3.0 | 2.0 | 2.5 | 2.5 | 2.0 | 2.5 |
| 24 | 13.5 | 12.0 | 13.0 | 5.5 | 5.5 | 5.5 | 2.5 | 2.0 | 2.5 | 2.5 | 2.0 | 2.0 |
| 25 | 12.0 | 10.0 | 11.0 | 5.0 | 3.5 | 4.5 | 2.0 | 1.0 | 1.5 | 3.0 | 2.0 | 2.0 |
| 26 | 10.5 | 8.0 | 9.0 | 5.5 | 2.0 | 3.5 | 3.0 | 2.0 | 2.0 | 2.5 | 2.0 | 2.5 |
| 27 | 11.5 | 7.5 | 9.0 | 4.5 | 2.5 | 3.5 | 3.0 | 2.0 | 2.5 | 3.0 | 2.0 | 2.5 |
| 28 | 10.0 | 8.5 | 9.0 | 5.0 | 4.0 | 4.5 | 3.0 | 1.5 | 2.5 | 2.5 | 2.0 | 2.0 |
| 29 | 10.0 | 7.5 | 8.5 | 5.0 | 3.5 | 4.0 | 3.5 | 2.5 | 3.0 | 2.5 | 1.5 | 2.0 |
| 30 | 10.0 | 9.0 | 9.5 | 5.0 | 3.0 | 4.0 | 3.0 | 1.5 | 2.5 | 2.5 | 1.5 | 2.0 |
| 31 | 10.5 | 8.5 | 9.0 | --- | --- | --- | 3.0 | 1.5 | 2.0 | 3.0 | 1.5 | 2.0 |
| MONTH | 17.0 | 7.5 | 13.5 | 10.0 | 2.0 | 6.5 | 9.0 | .0 | 2.0 | 3.0 | 1.5 | 2.0 |

## 01425000 WEST BRANCH DELAWARE RIVER AT STILESVILLE, NY--Continued

### TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | 2.5 | 1.0 | 2.0 | 3.0 | 2.5 | 3.0 | 12.5 | 5.0 | 9.0 | 14.5 | 6.5 | 10.0 |
| 2 | 2.5 | .5 | 2.0 | 4.0 | 1.5 | 2.5 | 13.0 | 6.5 | 9.5 | 12.0 | 7.5 | 9.0 |
| 3 | 2.0 | .5 | .5 | 3.0 | .5 | 1.0 | 15.5 | 4.0 | 10.0 | 16.5 | 5.5 | 10.5 |
| 4 | 1.0 | .0 | .5 | 3.0 | .5 | 1.5 | 13.0 | 9.5 | 11.0 | 18.0 | 6.5 | 12.0 |
| 5 | 1.5 | .0 | .5 | 3.0 | 1.5 | 2.0 | 12.0 | 8.5 | 10.5 | 19.0 | 8.0 | 13.0 |
| 6 | .5 | .0 | .0 | 5.0 | .5 | 2.5 | 8.0 | 3.5 | 6.0 | 12.0 | 7.0 | 9.5 |
| 7 | 1.0 | .0 | .0 | 2.0 | .5 | 1.0 | 14.5 | 1.5 | 7.5 | 15.5 | 4.5 | 9.5 |
| 8 | 1.0 | .0 | .0 | 4.0 | 1.5 | 2.5 | 16.5 | 5.0 | 10.5 | 17.5 | 6.0 | 11.0 |
| 9 | .5 | .0 | .0 | 5.5 | 2.0 | 4.0 | 12.0 | 7.5 | 10.0 | 17.0 | 7.0 | 11.5 |
| 10 | .5 | .0 | .0 | 6.0 | 2.5 | 4.0 | 16.5 | 4.5 | 10.5 | 19.0 | 8.0 | 13.0 |
| 11 | 1.5 | .0 | .5 | 6.5 | 2.5 | 4.0 | 12.0 | 7.5 | 9.5 | 12.5 | 11.0 | 11.5 |
| 12 | 2.0 | .0 | .5 | 8.0 | 1.0 | 4.0 | 14.5 | 8.5 | 11.0 | 11.5 | 8.5 | 10.0 |
| 13 | 2.5 | .5 | 1.0 | 7.5 | 3.0 | 5.0 | 16.5 | 7.0 | 11.0 | 15.5 | 7.0 | 10.5 |
| 14 | 3.0 | .5 | 1.0 | 3.5 | .5 | 1.5 | 8.5 | 5.5 | 7.0 | 18.0 | 7.0 | 12.5 |
| 15 | 4.0 | .0 | 1.5 | 9.0 | .5 | 4.0 | 12.0 | 3.0 | 7.0 | 17.0 | 10.0 | 12.5 |
| 16 | 6.0 | .5 | 3.0 | 5.0 | .0 | 3.5 | 14.5 | 3.0 | 8.0 | 11.5 | 8.5 | 10.0 |
| 17 | 6.5 | 2.0 | 4.0 | 2.5 | .5 | 1.0 | 9.5 | 6.0 | 7.5 | 16.5 | 7.0 | 11.0 |
| 18 | 7.5 | 2.5 | 4.5 | 4.0 | .5 | 1.5 | 15.0 | 8.0 | 10.5 | 15.5 | 6.5 | 10.5 |
| 19 | 7.5 | 2.5 | 4.5 | 2.5 | .5 | 1.5 | 12.5 | 5.5 | 9.0 | 15.0 | 6.5 | 10.5 |
| 20 | 5.5 | 3.5 | 5.0 | 3.5 | .5 | 1.5 | 9.0 | 4.0 | 7.0 | 18.0 | 6.5 | 12.0 |
| 21 | 5.5 | 4.0 | 5.0 | 2.0 | .5 | 1.5 | 12.0 | 2.0 | 6.5 | 18.0 | 7.5 | 12.5 |
| 22 | 8.0 | 4.5 | 6.0 | 6.0 | 1.5 | 3.5 | 14.5 | 3.5 | 8.5 | 18.5 | 8.5 | 13.0 |
| 23 | 6.5 | 5.5 | 6.0 | 9.5 | 1.5 | 5.0 | 7.5 | 6.0 | 7.0 | 18.5 | 8.5 | 13.0 |
| 24 | 9.5 | 4.5 | 6.5 | 7.5 | 2.5 | 5.0 | 10.0 | 7.0 | 8.5 | 18.5 | 8.0 | 13.0 |
| 25 | 5.0 | 2.5 | 3.5 | 9.0 | 3.5 | 5.5 | 6.5 | 5.5 | 6.0 | 19.0 | 9.5 | 13.5 |
| 26 | 3.0 | 2.0 | 2.5 | 12.5 | 1.5 | 6.5 | 11.5 | 5.0 | 8.0 | 18.5 | 10.5 | 14.5 |
| 27 | 7.5 | 1.0 | 3.5 | 6.5 | 3.5 | 5.5 | 15.5 | 6.5 | 10.5 | 18.0 | 10.0 | 13.5 |
| 28 | 3.0 | 1.5 | 2.0 | 12.5 | 1.5 | 7.0 | 12.5 | 7.5 | 10.0 | 16.0 | 10.0 | 13.0 |
| 29 | --- | --- | --- | 14.5 | 3.5 | 9.0 | 11.5 | 9.5 | 10.0 | 16.0 | 10.0 | 12.5 |
| 30 | --- | --- | --- | 9.5 | 8.0 | 8.5 | 12.0 | 8.0 | 10.0 | 17.5 | 10.5 | 13.5 |
| 31 | --- | --- | --- | 12.0 | 7.0 | 9.0 | --- | --- | --- | 17.5 | 10.5 | 13.0 |
| MONTH | 9.5 | .0 | 2.5 | 14.5 | .0 | 4.0 | 16.5 | 1.5 | 9.0 | 19.0 | 4.5 | 12.0 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 19.0 | 8.5 | 13.0 | 16.0 | 7.5 | 12.0 | 10.0 | 8.0 | 9.0 | 13.0 | 11.5 | 12.0 |
| 2 | 12.5 | 9.5 | 11.0 | 18.5 | 7.5 | 12.5 | 10.5 | 8.0 | 9.0 | 12.5 | 12.0 | 12.0 |
| 3 | 12.5 | 9.5 | 10.5 | 15.0 | 8.0 | 10.5 | 9.5 | 8.0 | 8.5 | 12.5 | 12.0 | 12.0 |
| 4 | 18.0 | 10.0 | 13.5 | 8.5 | 7.5 | 8.0 | 10.0 | 8.5 | 9.0 | 12.5 | 12.0 | 12.0 |
| 5 | 18.5 | 10.0 | 13.5 | 13.0 | 7.5 | 9.5 | 9.0 | 8.5 | 9.0 | 12.5 | 12.0 | 12.5 |
| 6 | 19.0 | 10.0 | 14.0 | 16.5 | 7.5 | 11.0 | 10.0 | 8.5 | 9.0 | 13.0 | 12.5 | 12.5 |
| 7 | 14.5 | 9.0 | 11.5 | 19.0 | 9.0 | 13.0 | 11.0 | 8.5 | 9.5 | 13.5 | 12.5 | 13.0 |
| 8 | 19.5 | 8.5 | 13.5 | 13.5 | 8.0 | 10.5 | 10.0 | 8.5 | 9.0 | 13.0 | 12.5 | 12.5 |
| 9 | 18.0 | 11.5 | 14.0 | 13.5 | 8.0 | 10.5 | 10.5 | 8.5 | 9.5 | 15.5 | 12.0 | 13.5 |
| 10 | 15.5 | 10.0 | 12.5 | 13.0 | 8.0 | 9.0 | 11.0 | 8.5 | 9.5 | 15.5 | 11.0 | 13.0 |
| 11 | 19.0 | 9.0 | 13.5 | 10.0 | 8.0 | 9.0 | 11.5 | 8.5 | 9.5 | 14.0 | 12.0 | 13.0 |
| 12 | 13.0 | 7.0 | 8.0 | 10.5 | 7.5 | 9.0 | 10.5 | 8.5 | 9.5 | 13.5 | 12.5 | 13.0 |
| 13 | 9.0 | 7.0 | 7.5 | 13.0 | 7.5 | 10.0 | 10.5 | 9.0 | 9.5 | 14.5 | 12.5 | 13.5 |
| 14 | 11.0 | 7.0 | 8.5 | 13.0 | 7.5 | 9.0 | 11.0 | 9.0 | 9.5 | 16.0 | 12.5 | 14.0 |
| 15 | 18.5 | 9.5 | 13.0 | 9.5 | 7.5 | 8.5 | 10.0 | 9.5 | 9.5 | 16.0 | 13.5 | 14.5 |
| 16 | 21.5 | 11.0 | 15.5 | 9.5 | 7.5 | 8.5 | 10.5 | 9.0 | 9.5 | 16.5 | 12.5 | 14.0 |
| 17 | 17.5 | 11.5 | 14.0 | 9.5 | 7.5 | 8.5 | 11.5 | 9.0 | 10.0 | 14.5 | 13.0 | 13.5 |
| 18 | 19.5 | 7.5 | 11.5 | 9.5 | 8.0 | 8.5 | 11.5 | 8.5 | 10.0 | 14.0 | 13.0 | 13.5 |
| 19 | 12.5 | 7.0 | 9.0 | 10.0 | 8.0 | 8.5 | 11.5 | 9.5 | 10.5 | 14.0 | 13.0 | 13.5 |
| 20 | 12.0 | 7.0 | 9.0 | 13.0 | 8.0 | 9.5 | 11.5 | 9.5 | 10.5 | 14.0 | 12.5 | 13.5 |
| 21 | 15.0 | 7.0 | 10.5 | 16.0 | 11.5 | 13.5 | 11.5 | 9.5 | 10.5 | 14.0 | 12.5 | 13.0 |
| 22 | 15.0 | 7.0 | 11.5 | 18.5 | 11.0 | 14.0 | 10.5 | 10.0 | 10.5 | 14.0 | 13.0 | 13.5 |
| 23 | 14.5 | 10.0 | 12.0 | 12.5 | 7.5 | 9.0 | 12.0 | 10.5 | 11.0 | 13.5 | 11.5 | 13.0 |
| 24 | 18.5 | 9.5 | 13.5 | 9.5 | 7.5 | 8.5 | 11.0 | 10.5 | 10.5 | 13.0 | 10.5 | 12.0 |
| 25 | 13.0 | 9.5 | 11.0 | 9.5 | 8.0 | 8.5 | 12.0 | 10.5 | 11.0 | 15.0 | 12.5 | 14.0 |
| 26 | 11.5 | 7.0 | 7.5 | 9.5 | 8.0 | 8.5 | 12.5 | 10.5 | 11.0 | 15.0 | 13.5 | 14.5 |
| 27 | 10.0 | 7.0 | 8.0 | 10.5 | 8.0 | 9.0 | 12.0 | 11.0 | 11.0 | 17.5 | 13.5 | 15.5 |
| 28 | 20.0 | 7.0 | 12.0 | 9.0 | 7.5 | 8.5 | 12.5 | 11.0 | 11.5 | 15.5 | 12.5 | 13.5 |
| 29 | 18.5 | 9.0 | 13.0 | 8.5 | 7.5 | 8.0 | 12.0 | 11.0 | 11.5 | 14.5 | 11.0 | 13.0 |
| 30 | 22.0 | 10.0 | 15.0 | 10.0 | 7.5 | 8.5 | 12.5 | 11.0 | 11.5 | 14.0 | 11.5 | 13.0 |
| 31 | --- | --- | --- | 10.0 | 7.5 | 8.5 | 12.0 | 11.5 | 12.0 | --- | --- | --- |
| MONTH | 22.0 | 7.0 | 11.5 | 19.0 | 7.5 | 9.5 | 12.5 | 8.0 | 10.0 | 17.5 | 10.5 | 13.0 |

## 01425675 OQUAGA CREEK NEAR NORTH SANFORD, NY

**LOCATION.**--Lat 42°10'28", long 75°26'25", Broome County, Hydrologic Unit 02040101, on left bank 20 ft (6 m) downstream from culvert on North Sanford Road, 0.2 mi (0.3 km) upstream from outlet of Stilson Pond, 1.5 mi (2.4 km) north of North Sanford, and 4.1 mi (6.6 km) upstream from Dry Brook. Water-quality sampling site at discharge station.

**DRAINAGE AREA.**--4.71 mi$^2$ (12.2 km$^2$).

### WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--October 1969 to September 1981 (discontinued).

**REVISED RECORDS.**--WRD NY 1971: 1970(P), 1970.

**GAGE.**--Water-stage recorder and concrete control. Altitude of gage is 1,480 ft (451 m), from topographic map.

**REMARKS.**--Records fair except those for winter periods, which are poor. Some regulation at low flow by dam above station.

**AVERAGE DISCHARGE.**--12 years, 8.96 ft$^3$/s (0.254 m$^3$/s), 25.83 in/yr (656 mm/yr).

**EXTREMES FOR PERIOD OF RECORD.**--Maximum discharge, 480 ft$^3$/s (13.6 m$^3$/s) Feb. 11, 1981, gage height, 2.96 ft (0.902 m) from rating curve extended above 100 ft$^3$/s (2.83 m$^3$/s); minimum discharge, 0.08 ft$^3$/s (0.002 m$^3$/s) Oct. 2, 1969.

**EXTREMES FOR CURRENT YEAR.**--Peak discharge above base of 120 ft$^3$/s (3.4 m$^3$/s) and maximum (*):

| Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) | Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 11 | 2100 | *480 | 13.6 | *2.96 | 0.902 | Apr. 29 | 2100 | 125 | 3.54 | 1.94 | 0.591 |
| Feb. 20 | 1900 | 158 | 4.47 | 2.06 | 0.628 | | | | | | |

Minimum discharge, 0.34 ft$^3$/s (0.010 m$^3$/s) Oct. 13, 14, 15, gage height, 0.34 ft (0.104 m).

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981 MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.2 | 1.1 | 11 | 2.5 | .84 | 12 | 4.1 | 29 | 3.1 | 1.2 | .85 | 1.2 |
| 2 | 1.2 | 1.7 | 13 | 2.5 | 3.5 | 10 | 5.4 | 20 | 2.5 | 1.1 | .91 | 1.3 |
| 3 | 1.2 | 2.0 | 28 | 2.3 | 7.2 | 9.1 | 5.3 | 14 | 2.6 | .90 | .90 | 1.3 |
| 4 | 1.2 | 2.2 | 18 | 2.3 | 7.8 | 7.5 | 5.6 | 11 | 2.8 | .90 | .90 | 1.2 |
| 5 | 1.2 | 2.0 | 13 | 2.3 | 8.1 | 6.9 | 5.3 | 8.8 | 2.5 | .90 | .90 | 1.2 |
| 6 | 1.2 | 2.0 | 10 | 2.0 | 7.8 | 6.9 | 5.3 | 7.4 | 2.3 | .90 | .90 | 1.2 |
| 7 | 1.2 | 1.8 | 8.7 | 2.2 | 7.5 | 6.6 | 5.2 | 6.5 | 2.0 | .80 | .90 | 1.0 |
| 8 | 1.2 | 2.0 | 9.4 | 2.0 | 7.2 | 6.3 | 5.1 | 6.1 | 1.7 | .72 | .93 | 1.2 |
| 9 | 1.2 | 2.2 | 12 | 1.9 | 6.9 | 6.0 | 5.0 | 5.7 | 1.5 | .72 | .90 | 1.1 |
| 10 | 1.2 | 2.8 | 11 | 1.8 | 6.0 | 5.8 | 5.2 | 5.2 | 1.4 | .64 | .90 | 1.1 |
| 11 | 1.2 | 2.9 | 9.1 | 1.8 | 147 | 5.6 | 5.1 | 5.3 | 1.2 | .64 | .92 | 1.1 |
| 12 | 1.2 | 2.9 | 7.8 | 1.7 | 131 | 5.5 | 5.1 | 13 | 1.1 | .64 | .90 | 1.0 |
| 13 | 1.1 | 2.8 | 7.2 | 1.6 | 39 | 5.4 | 4.9 | 19 | 1.0 | .64 | .90 | 1.0 |
| 14 | .34 | 2.9 | 6.9 | 1.5 | 24 | 5.3 | 5.2 | 12 | 1.1 | .80 | .90 | 1.3 |
| 15 | .39 | 2.9 | 6.3 | 1.4 | 17 | 5.1 | 5.5 | 10 | 1.4 | .72 | .93 | 1.0 |
| 16 | .39 | 2.9 | 6.1 | 1.4 | 13 | 5.0 | 5.5 | 14 | 1.4 | .72 | .91 | 1.0 |
| 17 | .39 | 2.9 | 5.8 | 1.4 | 19 | 4.8 | 5.6 | 12 | 1.5 | .72 | .90 | 1.0 |
| 18 | .50 | 3.4 | 5.5 | 1.3 | 37 | 4.8 | 5.8 | 9.3 | 1.4 | .72 | .90 | .98 |
| 19 | .50 | 3.4 | 5.3 | 1.3 | 53 | 4.6 | 5.7 | 7.4 | 1.1 | .72 | .90 | 1.0 |
| 20 | .50 | 3.3 | 4.8 | 1.3 | 109 | 4.6 | 5.5 | 6.5 | 1.0 | .99 | .90 | 1.0 |
| 21 | .50 | 3.1 | 4.6 | 1.2 | 81 | 4.5 | 5.1 | 6.1 | 1.5 | .97 | .90 | .93 |
| 22 | .50 | 2.9 | 4.2 | 1.1 | 42 | 4.0 | 4.9 | 5.7 | 2.5 | .86 | .90 | 1.0 |
| 23 | .50 | 2.9 | 3.8 | 1.1 | 30 | 3.8 | 4.9 | 5.3 | 2.8 | .80 | .90 | 1.0 |
| 24 | .50 | 6.1 | 3.8 | 1.0 | 35 | 3.7 | 6.0 | 4.9 | 2.6 | .81 | 1.0 | .93 |
| 25 | 1.2 | 27 | 3.4 | 1.0 | 26 | 3.4 | 9.0 | 4.5 | 2.5 | .83 | 1.1 | .81 |
| 26 | 1.5 | 21 | 3.4 | .94 | 20 | 3.3 | 10 | 4.2 | 2.3 | .89 | 1.2 | .80 |
| 27 | .90 | 14 | 3.3 | .92 | 14 | 3.3 | 9.0 | 3.8 | 2.2 | .87 | 1.2 | .81 |
| 28 | .72 | 14 | 2.9 | .90 | 12 | 3.3 | 7.9 | 3.4 | 1.8 | .84 | 1.2 | .80 |
| 29 | .64 | 17 | 2.8 | .88 | --- | 3.2 | 42 | 3.2 | 1.7 | .92 | 1.2 | .80 |
| 30 | .64 | 13 | 2.8 | .86 | --- | 3.3 | 63 | 3.0 | 1.4 | .86 | 1.1 | .80 |
| 31 | .72 | --- | 2.6 | .84 | --- | 3.7 | --- | 3.3 | --- | .81 | 1.2 | --- |
| TOTAL | 26.83 | 171.1 | 236.5 | 47.24 | 911.84 | 167.3 | 267.2 | 269.6 | 55.9 | 25.55 | 29.95 | 30.86 |
| MEAN | .87 | 5.70 | 7.63 | 1.52 | 32.6 | 5.40 | 8.91 | 8.70 | 1.86 | .82 | .97 | 1.03 |
| MAX | 1.5 | 27 | 28 | 2.5 | 147 | 12 | 63 | 29 | 3.1 | 1.2 | 1.2 | 1.3 |
| MIN | .34 | 1.1 | 2.6 | .84 | .84 | 3.2 | 4.1 | 3.0 | 1.0 | .64 | .85 | .80 |
| CFSM | .19 | 1.21 | 1.62 | .32 | 6.92 | 1.15 | 1.89 | 1.85 | .40 | .17 | .21 | .22 |
| IN. | .21 | 1.35 | 1.87 | .37 | 7.20 | 1.32 | 2.11 | 2.13 | .44 | .20 | .24 | .24 |

CAL YR 1980 TOTAL 2077.93 MEAN 5.68 MAX 111 MIN .34 CFSM 1.21 IN 16.41

WTR YR 1981 TOTAL 2239.87 MEAN 6.14 MAX 147 MIN .34 CFSM 1.30 IN 17.69

## C1425675 OQUAGA CREEK NEAR NORTH SANFORD, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1970 to September 1981 (discontinued).
CHEMICAL DATA: 1971 (c), 1972 (a), 1973-74 (c), 1975 (d), 1976-81 (c).
NUTRIENT DATA: 1971, 1974 (c); 1975 (b); 1976-81 (c).
BIOLOGICAL DATA: 1974 (a), 1975-81 (c).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1970 to September 1981 (discontinued).

INSTRUMENTATION.--Temperature recorder since October 1970.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1971-75, 1977-81), 21.0°C June 30, July 1, 1971, July 23, 24, 1972; minimum (except water year 1979), freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 18.5°C July 8; minimum, freezing point on Jan. 29 to Feb. 1.

### WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS (CFS) | SPE-CIFIC CON-DUCT-ANCE (UMHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | TUR-BID-ITY (NTU) | BARO-METRIC PRES-SURE (MM OF HG) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) | STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) | HARD-NESS (MG/L AS CACO3) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | | | |
| 15... | 1500 | 0.34 | 81 | 6.9 | — | .30 | 750 | 10.4 | 100 | 24 | 31 | 37 |
| MAR | | | | | | | | | | | | |
| 16... | 1300 | 4.8 | 48 | 6.0 | 3.0 | 1.6 | 711 | 9.4 | 78 | K4 | <1 | 17 |
| APR | | | | | | | | | | | | |
| 08... | 1300 | 5.1 | 52 | 7.2 | 7.0 | .50 | 727 | 11.5 | 99 | <1 | K4 | 16 |
| MAY | | | | | | | | | | | | |
| 05... | 1800 | 8.4 | 32 | 6.0 | 11.0 | .70 | 722 | 9.8 | 96 | K10 | K8 | 17 |
| JUN | | | | | | | | | | | | |
| 02... | 1500 | 2.8 | 55 | 5.8 | 12.0 | 1.6 | 728 | 9.8 | 98 | K20 | K90 | 20 |
| JUL | | | | | | | | | | | | |
| 01... | 1130 | 1.1 | 66 | 5.4 | 14.5 | — | 733 | 9.7 | 102 | K15 | 22 | — |
| 30... | 1000 | .90 | 69 | 6.3 | 14.0 | 4.0 | 729 | 10.0 | 105 | 67 | K63 | 34 |
| AUG | | | | | | | | | | | | |
| 25... | 1400 | 1.2 | 88 | 6.5 | 16.5 | 2.4 | 729 | 8.3 | 104 | 27 | 62 | 29 |

| DATE | HARD-NESS NONCAR-BONATE (MG/L AS CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | ALKA-LINITY LAB (MG/L AS CACO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | | | |
| 15... | 10 | 11 | 2.3 | 2.4 | .8 | 27 | 9.5 | 2.9 | .1 | 2.9 | 55 | 48 |
| MAR | | | | | | | | | | | | |
| 16... | 8.0 | 4.7 | 1.2 | 2.2 | .6 | 9.0 | 9.7 | 3.3 | <.1 | 3.4 | 32 | 31 |
| APR | | | | | | | | | | | | |
| 08... | 4.0 | 4.5 | 1.2 | 2.1 | .6 | 12 | 8.4 | 3.0 | <.1 | 2.9 | 36 | 30 |
| MAY | | | | | | | | | | | | |
| 05... | 11 | 4.9 | 1.2 | 2.1 | .6 | 6.0 | 9.[illegible] | 3.3 | <.1 | 3.1 | 37 | 29 |
| JUN | | | | | | | | | | | | |
| 02... | 7.0 | 5.8 | 1.4 | 2.3 | .4 | 13 | 9.3 | 2.9 | <.1 | 2.6 | 39 | 33 |
| JUL | | | | | | | | | | | | |
| 01... | — | — | — | — | — | — | — | — | — | — | — | — |
| 30... | 10 | 9.9 | 2.2 | 2.9 | .7 | 24 | 6.1 | 2.8 | <.1 | 3.9 | — | 43 |
| AUG | | | | | | | | | | | | |
| 25... | 8.0 | 8.0 | 2.2 | 2.9 | .8 | 21 | 6.7 | 3.3 | <.1 | 3.6 | 56 | 40 |

K Results based on colony count outside the acceptable range (non-ideal colony count).

## 01425675 OQUAGA CREEK NEAR NORTH SANFORD, NY--Continued

### WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) | NITRO-GEN, NITRATE TOTAL (MG/L AS N) | NITRO-GEN, NITRITE TOTAL (MG/L AS N) | NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) | NITRO-GEN, ORGANIC TOTAL (MG/L AS N) | NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) | NITRO-GEN, TOTAL (MG/L AS N) | PHOS-PHORUS, TOTAL (MG/L AS P) | PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P) | METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT<br>15... | 14 | .07 | .000 | .07 | .040 | .19 | .23 | .30 | .030 | .000 | — |
| MAR<br>16... | 12 | — | <.010 | .19 | .020 | — | <.10 | — | <.010 | .010 | .00 |
| APR<br>08... | 11 | — | <.010 | .14 | .040 | — | <.10 | — | .010 | <.010 | .00 |
| MAY<br>05... | 6 | — | <.010 | .11 | .020 | — | <.10 | — | <.010 | <.010 | .10 |
| JUN<br>02... | 29 | — | <.010 | .11 | .050 | .28 | .33 | .44 | .020 | <.010 | .00 |
| JUL<br>01... | — | — | <.010 | .21 | .050 | .76 | .81 | 1.0 | .030 | <.010 | — |
| 30... | 12 | — | <.010 | .26 | <.010 | — | .24 | .50 | .020 | <.010 | .00 |
| AUG<br>25... | 11 | — | <.010 | .77 | .030 | .34 | .37 | 1.1 | .020 | <.010 | .00 |

### TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 14.5 | 12.0 | 13.5 | 6.5 | 5.0 | 5.5 | 4.5 | 4.0 | 4.5 | 2.5 | 1.5 | 2.0 |
| 2 | 14.0 | 13.0 | 13.5 | 5.5 | 4.5 | 5.5 | 5.0 | 4.5 | 4.5 | 2.5 | 1.0 | 2.0 |
| 3 | 14.0 | 13.0 | 13.5 | 6.0 | 4.0 | 5.0 | 4.5 | 3.5 | 4.0 | 1.5 | .5 | 1.0 |
| 4 | 13.0 | 11.0 | 12.0 | 7.0 | 5.5 | 6.0 | 4.0 | 3.5 | 3.5 | .5 | .5 | .5 |
| 5 | 12.0 | 9.5 | 10.5 | 6.5 | 4.5 | 5.5 | 3.5 | 3.5 | 3.5 | 1.5 | .5 | 1.0 |
| 6 | 11.5 | 9.0 | 10.0 | 6.0 | 4.0 | 5.0 | 4.0 | 3.5 | 4.0 | 2.0 | 1.0 | 1.5 |
| 7 | 12.0 | 10.0 | 11.0 | 7.0 | 5.5 | 6.0 | 4.5 | 4.0 | 4.5 | 3.0 | 1.0 | 2.0 |
| 8 | 12.5 | 9.0 | 11.0 | 7.0 | 4.0 | 6.0 | 5.0 | 4.5 | 5.0 | 1.0 | .5 | .5 |
| 9 | 12.0 | 9.0 | 11.0 | 5.5 | 4.0 | 5.0 | 4.5 | 4.5 | 4.5 | 1.0 | .5 | 1.0 |
| 10 | 10.5 | 7.5 | 9.0 | 5.5 | 3.5 | 5.0 | 4.5 | 4.0 | 4.5 | 1.0 | .5 | 1.0 |
| 11 | 12.5 | 10.5 | 11.5 | 4.0 | 3.5 | 4.0 | 4.0 | 3.5 | 4.0 | .5 | .5 | .5 |
| 12 | 11.5 | 10.0 | 10.5 | 4.0 | 3.5 | 4.0 | 4.5 | 3.5 | 4.0 | .5 | .5 | .5 |
| 13 | 10.0 | 7.5 | 9.0 | 4.5 | 3.5 | 4.0 | 5.0 | 4.0 | 4.5 | .5 | .5 | .5 |
| 14 | 8.0 | 6.5 | 7.0 | 5.0 | 4.5 | 4.5 | 4.0 | 3.5 | 4.0 | 1.5 | .5 | 1.0 |
| 15 | 8.0 | 6.5 | 7.0 | 4.5 | 4.0 | 4.0 | 4.0 | 3.5 | 3.5 | 2.0 | 1.0 | 1.5 |
| 16 | 10.5 | 8.0 | 9.0 | 4.0 | 2.5 | 3.0 | 4.5 | 3.5 | 4.0 | 2.5 | 2.0 | 2.0 |
| 17 | 11.5 | 9.5 | 10.5 | 3.5 | .5 | 2.0 | 4.0 | 3.0 | 3.5 | 2.0 | 1.0 | 1.5 |
| 18 | 13.0 | 11.5 | 12.5 | 3.0 | 1.0 | 2.5 | 4.5 | 3.0 | 4.0 | 2.0 | 1.0 | 1.5 |
| 19 | 12.0 | 9.5 | 10.5 | 3.5 | 3.0 | 3.5 | 4.5 | 3.0 | 3.5 | 2.5 | 2.0 | 2.5 |
| 20 | 9.5 | 7.5 | 8.5 | 4.0 | 3.0 | 3.5 | 3.5 | 2.0 | 2.5 | 2.5 | 1.0 | 2.5 |
| 21 | 9.0 | 7.5 | 8.0 | 4.0 | 3.0 | 3.5 | 3.0 | 3.0 | 3.0 | 1.0 | .5 | .5 |
| 22 | 7.5 | 5.5 | 6.5 | 4.5 | 3.0 | 4.0 | 3.5 | 2.0 | 3.0 | 2.0 | .5 | 1.0 |
| 23 | 6.5 | 4.5 | 5.5 | 4.5 | 2.5 | 3.5 | 4.0 | 3.5 | 3.5 | 2.5 | 2.0 | 2.5 |
| 24 | 5.5 | 3.0 | 4.5 | 4.5 | 4.0 | 4.0 | 4.0 | 2.0 | 3.5 | 2.5 | 2.0 | 2.0 |
| 25 | 8.5 | 5.5 | 7.0 | 4.5 | 4.0 | 4.0 | 2.0 | 1.0 | 1.0 | 2.5 | 1.5 | 2.0 |
| 26 | 7.0 | 6.0 | 6.5 | 4.0 | 4.0 | 4.0 | 2.5 | 1.0 | 2.0 | 3.5 | 2.5 | 3.0 |
| 27 | 6.5 | 5.5 | 6.0 | 4.0 | 4.0 | 4.0 | 3.0 | 2.0 | 2.5 | 3.5 | 3.0 | 3.0 |
| 28 | 6.5 | 5.5 | 6.0 | 4.5 | 4.0 | 4.5 | 4.0 | 2.0 | 3.5 | 3.0 | 2.0 | 2.5 |
| 29 | 5.5 | 5.0 | 5.5 | 4.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.5 | 2.5 | .0 | 1.0 |
| 30 | 6.0 | 4.5 | 5.5 | 4.0 | 4.0 | 4.0 | 4.5 | 1.5 | 3.0 | .0 | .0 | .0 |
| 31 | 6.0 | 3.5 | 5.0 | --- | --- | --- | 2.0 | 1.0 | 1.5 | .5 | .0 | .0 |
| MONTH | 14.5 | 3.0 | 9.0 | 7.0 | .5 | 4.5 | 5.0 | 1.0 | 3.5 | 3.5 | .0 | 1.5 |

## 01425675 OQUAGA CREEK NEAR NORTH SANFORD, NY--Continued

### TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | 1.0 | .0 | .5 | 4.0 | 4.0 | 4.0 | 6.5 | 4.0 | 5.0 | 11.0 | 9.5 | 10.0 |
| 2 | 2.0 | .5 | 1.5 | 4.0 | 3.5 | 4.0 | 5.5 | 4.5 | 5.0 | 10.0 | 9.0 | 9.5 |
| 3 | 2.5 | 2.0 | 2.5 | 3.5 | 3.0 | 3.5 | 6.5 | 4.0 | 5.5 | 10.5 | 8.5 | 9.5 |
| 4 | 3.0 | 2.5 | 3.0 | 4.0 | 3.0 | 3.5 | 6.5 | 5.5 | 6.0 | 11.0 | 8.5 | 9.5 |
| 5 | 3.0 | 3.0 | 3.0 | 4.0 | 4.0 | 4.0 | 6.5 | 5.0 | 6.0 | 11.5 | 9.0 | 10.0 |
| 6 | 4.0 | 3.0 | 3.5 | 4.0 | 3.5 | 3.5 | 5.5 | 4.5 | 5.0 | 10.0 | 8.5 | 9.0 |
| 7 | 4.0 | 3.5 | 4.0 | 4.0 | 3.5 | 3.5 | 6.5 | 4.5 | 5.5 | 10.0 | 8.0 | 8.5 |
| 8 | 4.5 | 2.5 | 3.5 | 4.5 | 3.5 | 4.0 | 8.0 | 4.5 | 5.0 | 10.5 | 7.5 | 9.0 |
| 9 | 3.5 | 3.0 | 3.5 | 4.5 | 4.0 | 4.0 | 6.0 | 4.0 | 4.5 | 10.5 | 8.0 | 9.0 |
| 10 | 4.0 | 3.0 | 3.5 | 4.5 | 4.0 | 4.0 | 6.0 | 3.5 | 4.5 | 11.5 | 8.5 | 10.0 |
| 11 | 4.5 | 2.0 | 3.0 | 4.5 | 3.5 | 4.0 | 6.0 | 4.5 | 5.0 | 10.5 | 9.5 | 10.0 |
| 12 | 2.0 | 1.5 | 1.5 | 4.0 | 3.0 | 3.5 | 5.5 | 5.0 | 5.0 | 11.5 | 9.5 | 10.5 |
| 13 | 1.5 | 1.5 | 1.5 | 4.0 | 3.0 | 3.5 | 6.5 | 4.5 | 5.0 | 12.0 | 11.0 | 11.5 |
| 14 | 2.5 | 1.5 | 2.0 | 3.0 | 2.5 | 2.5 | 5.5 | 4.5 | 4.5 | 12.0 | 10.5 | 11.0 |
| 15 | 3.0 | 2.0 | 2.5 | 4.0 | 2.5 | 3.0 | 5.5 | 4.0 | 4.5 | 12.5 | 11.0 | 11.5 |
| 16 | 3.5 | 3.0 | 3.0 | 3.5 | 2.0 | 3.5 | 7.0 | 4.5 | 5.5 | 12.0 | 11.5 | 11.5 |
| 17 | 3.5 | 2.5 | 3.0 | 3.0 | 1.5 | 2.5 | 6.5 | 5.5 | 6.0 | 12.0 | 10.5 | 11.0 |
| 18 | 2.5 | 2.5 | 2.5 | 2.5 | 1.5 | 2.0 | 8.0 | 6.0 | 7.0 | 11.5 | 10.0 | 10.5 |
| 19 | 2.5 | 2.5 | 2.5 | 3.0 | 2.0 | 2.5 | 7.0 | 5.5 | 6.0 | 11.5 | 9.5 | 10.5 |
| 20 | 2.5 | 2.5 | 2.5 | 3.0 | 2.0 | 2.5 | 7.0 | 5.5 | 6.0 | 12.0 | 9.5 | 10.5 |
| 21 | 3.0 | 2.5 | 3.0 | 3.0 | 1.5 | 2.5 | 7.0 | 5.5 | 6.0 | 12.0 | 9.5 | 10.5 |
| 22 | 3.5 | 3.0 | 3.5 | 4.0 | 3.0 | 3.5 | 8.0 | 5.5 | 6.5 | 12.5 | 10.0 | 11.0 |
| 23 | 4.0 | 3.5 | 3.5 | 4.5 | 2.5 | 3.5 | 7.0 | 6.5 | 6.5 | 12.5 | 10.0 | 11.0 |
| 24 | 4.0 | 3.5 | 4.0 | 4.5 | 3.0 | 3.5 | 7.5 | 7.0 | 7.0 | 13.0 | 10.0 | 11.5 |
| 25 | 4.0 | 4.0 | 4.0 | 4.5 | 3.0 | 3.5 | 7.0 | 6.5 | 7.0 | 13.5 | 11.0 | 12.0 |
| 26 | 4.0 | 3.5 | 4.0 | 5.0 | 2.5 | 3.5 | 8.0 | 7.0 | 7.5 | 13.5 | 11.5 | 12.0 |
| 27 | 4.0 | 3.5 | 3.5 | 4.5 | 3.5 | 4.0 | 9.0 | 7.0 | 7.5 | 13.5 | 11.5 | 12.0 |
| 28 | 4.0 | 3.5 | 3.5 | 5.5 | 2.5 | 3.5 | 8.5 | 7.5 | 8.0 | 13.5 | 12.0 | 12.5 |
| 29 | --- | --- | --- | 6.5 | 3.5 | 4.5 | 10.0 | 8.0 | 9.0 | 13.5 | 12.0 | 12.5 |
| 30 | --- | --- | --- | 5.5 | 4.5 | 5.0 | 10.0 | 9.5 | 9.5 | 13.5 | 12.0 | 12.5 |
| 31 | --- | --- | --- | 6.5 | 4.5 | 5.0 | --- | --- | --- | 13.0 | 11.0 | 12.0 |
| MONTH | 4.5 | .0 | 3.0 | 6.5 | 1.5 | 3.5 | 10.0 | 3.5 | 6.0 | 13.5 | 7.5 | 10.5 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 13.0 | 10.0 | 11.5 | 15.0 | 13.0 | 14.0 | 16.5 | 13.5 | 15.0 | 17.0 | 15.5 | 16.5 |
| 2 | 12.0 | 11.0 | 11.5 | 16.0 | 13.5 | 14.5 | 16.5 | 13.5 | 15.0 | 16.5 | 15.5 | 16.0 |
| 3 | 12.0 | 11.5 | 11.5 | 16.0 | 14.0 | 14.5 | 17.0 | 14.5 | 15.5 | 16.5 | 15.5 | 16.0 |
| 4 | 13.5 | 12.0 | 12.5 | 14.5 | 14.0 | 14.0 | 17.0 | 15.0 | 16.0 | 15.5 | 15.5 | 15.5 |
| 5 | 13.5 | 12.0 | 12.5 | 15.0 | 13.5 | 14.5 | 16.0 | 15.0 | 15.5 | 16.0 | 15.0 | 15.5 |
| 6 | 14.5 | 12.0 | 13.0 | 16.5 | 13.5 | 15.0 | 17.0 | 14.5 | 15.5 | 16.0 | 15.5 | 16.0 |
| 7 | 12.5 | 11.0 | 12.0 | 17.5 | 13.5 | 15.5 | 17.0 | 13.5 | 15.0 | 17.5 | 16.0 | 16.5 |
| 8 | 14.0 | 10.0 | 12.0 | 18.5 | 14.0 | 16.0 | 16.0 | 15.0 | 15.5 | 16.5 | 15.5 | 16.0 |
| 9 | 14.5 | 12.5 | 13.0 | 18.0 | 15.0 | 16.5 | 17.0 | 15.0 | 16.0 | 15.5 | 12.5 | 14.5 |
| 10 | 13.5 | 11.5 | 12.5 | 17.5 | 14.5 | 16.5 | 17.5 | 14.5 | 16.0 | 15.0 | 11.5 | 13.5 |
| 11 | 14.5 | 11.0 | 12.5 | 18.0 | 13.5 | 15.5 | 17.5 | 14.5 | 16.0 | 16.5 | 14.5 | 15.5 |
| 12 | 14.0 | 11.0 | 12.5 | 17.0 | 14.0 | 15.5 | 17.0 | 15.0 | 15.5 | 17.5 | 15.0 | 16.0 |
| 13 | 14.5 | 11.5 | 13.0 | 18.0 | 14.5 | 16.0 | 16.5 | 13.5 | 15.0 | 16.5 | 13.5 | 15.0 |
| 14 | 13.0 | 12.5 | 12.5 | 16.0 | 14.0 | 15.0 | 17.0 | 15.0 | 16.0 | 17.5 | 14.5 | 16.0 |
| 15 | 15.0 | 12.0 | 13.0 | 16.5 | 14.0 | 15.0 | 16.0 | 15.5 | 16.0 | 16.5 | 14.5 | 16.0 |
| 16 | 16.0 | 13.0 | 14.0 | 16.5 | 12.0 | 14.5 | 16.5 | 14.0 | 15.5 | 15.5 | 14.0 | 15.0 |
| 17 | 14.5 | 12.5 | 13.5 | 16.5 | 13.0 | 14.5 | 15.5 | 12.5 | 14.0 | 15.5 | 14.5 | 15.0 |
| 18 | 15.5 | 11.0 | 13.0 | 17.0 | 13.5 | 15.0 | 16.0 | 11.5 | 13.5 | 16.0 | 14.5 | 15.0 |
| 19 | 15.5 | 12.0 | 13.5 | 16.5 | 14.0 | 15.0 | 16.0 | 12.5 | 14.0 | 15.0 | 14.0 | 14.5 |
| 20 | 14.0 | 13.0 | 13.5 | 16.0 | 15.0 | 15.5 | 16.5 | 13.0 | 14.5 | 14.5 | 13.0 | 14.0 |
| 21 | 14.5 | 12.5 | 13.5 | 16.5 | 15.0 | 16.0 | 16.5 | 12.5 | 14.5 | 14.0 | 11.5 | 13.0 |
| 22 | 14.5 | 12.5 | 13.5 | 16.0 | 13.0 | 15.0 | 15.5 | 14.0 | 15.0 | 15.0 | 13.0 | 14.0 |
| 23 | 13.0 | 12.0 | 12.5 | 16.0 | 12.0 | 14.0 | 16.5 | 13.5 | 15.0 | 13.0 | 11.5 | 12.0 |
| 24 | 14.0 | 11.0 | 12.5 | 15.5 | 12.0 | 13.5 | 16.0 | 14.0 | 14.5 | 12.0 | 11.5 | 11.5 |
| 25 | 13.5 | 12.5 | 13.0 | 16.5 | 14.0 | 15.0 | 16.5 | 14.0 | 15.0 | 13.5 | 10.5 | 12.0 |
| 26 | 13.0 | 12.0 | 12.0 | 16.0 | 14.5 | 15.0 | 16.0 | 12.5 | 14.0 | 14.0 | 12.0 | 13.0 |
| 27 | 14.5 | 11.0 | 12.5 | 16.5 | 13.5 | 15.5 | 16.0 | 13.0 | 14.5 | 15.5 | 13.0 | 14.0 |
| 28 | 15.0 | 11.0 | 13.0 | 14.5 | 13.0 | 13.5 | 16.5 | 15.0 | 15.5 | 13.5 | 11.0 | 12.0 |
| 29 | 15.0 | 11.5 | 13.0 | 15.0 | 13.0 | 14.5 | 16.5 | 15.0 | 16.0 | 11.0 | 10.0 | 10.5 |
| 30 | 16.0 | 12.5 | 14.0 | 16.0 | 12.5 | 14.0 | 17.0 | 15.5 | 16.0 | 11.0 | 9.5 | 10.0 |
| 31 | --- | --- | --- | 16.5 | 12.0 | 14.5 | 16.5 | 15.5 | 16.0 | --- | --- | --- |
| MONTH | 16.0 | 10.0 | 13.0 | 18.5 | 12.0 | 15.0 | 17.5 | 11.5 | 15.0 | 17.5 | 9.5 | 14.5 |

## 01426500 WEST BRANCH DELAWARE RIVER AT HALE EDDY, NY

LOCATION.--42°00'11", long 75°23'02", Delaware County, Hydrologic Unit 02040101, on left bank at downstream side of bridge on County Highway 56 in Hale Eddy, and 9 mi (14 km) upstream from confluence of East and West Branches near Hancock. Water-quality sampling site at discharge station.

DRAINAGE AREA.--593 mi$^2$ (1,536 km$^2$).

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1912 to current year.

REVISED RECORDS.--WSP 756: Drainage area. WSP 871: 1916.

GAGE.--Water-stage recorder. Datum of gage is 946.46 ft (288.481 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 8, 1928, nonrecording gage.

REMARKS.--Records good except those for winter periods, which are poor. Subsequent to October 1963, entire flow from 454 mi$^2$ (1,176 km$^2$) drainage area controlled by Cannonsville Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,900 ft$^3$/s (818 m$^3$/s) Mar. 22, 1948, gage height, 15.69 ft (4.782 m); maximum gage height, 15.8 ft (4.82 m) Sept. 30, 1924, from graph based on gage readings; minimum discharge, 17 ft$^3$/s (0.48 m$^3$/s) Oct. 20, 1963; minimum gage height, 1.03 ft (0.314 m) Aug. 4, 1936.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 10, 1903, reached a stage of 20.3 ft (6.19 m), from floodmarks, discharge, about 46,000 ft$^3$/s (1,300 m$^3$/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,960 ft$^3$/s (197 m$^3$/s) Feb. 11, gage height, 8.58 ft (2.615 m); minimum, 57 ft$^3$/s (1.61 m$^3$/s) July 23, gage height, 1.26 ft (0.384 m); minimum daily, 64 ft$^3$/s (1.81 m$^3$/s) Sept. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1190 | 346 | 301 | 310 | 577 | 403 | 135 | 784 | 117 | 69 | 971 | 958 |
| 2 | 1170 | 394 | 350 | 370 | 588 | 337 | 318 | 564 | 117 | 178 | 717 | 952 |
| 3 | 1190 | 429 | 691 | 380 | 420 | 289 | 241 | 434 | 117 | 369 | 585 | 958 |
| 4 | 1100 | 424 | 470 | 380 | 240 | 251 | 219 | 345 | 159 | 606 | 695 | 977 |
| 5 | 1020 | 451 | 370 | 310 | 190 | 231 | 219 | 285 | 123 | 378 | 739 | 977 |
| 6 | 1040 | 483 | 300 | 300 | 170 | 207 | 210 | 248 | 106 | 159 | 750 | 1100 |
| 7 | 1130 | 536 | 250 | 360 | 150 | 184 | 181 | 222 | 94 | 114 | 842 | 580 |
| 8 | 1150 | 420 | 260 | 370 | 140 | 173 | 162 | 192 | 86 | 189 | 790 | 386 |
| 9 | 1000 | 398 | 270 | 420 | 120 | 167 | 159 | 167 | 94 | 228 | 523 | 251 |
| 10 | 934 | 455 | 250 | 420 | 110 | 165 | 184 | 154 | 86 | 554 | 569 | 108 |
| 11 | 798 | 411 | 230 | 370 | 2930 | 162 | 157 | 184 | 83 | 690 | 673 | 580 |
| 12 | 811 | 394 | 210 | 370 | 2780 | 154 | 157 | 528 | 326 | 349 | 673 | 813 |
| 13 | 774 | 394 | 190 | 430 | 1000 | 162 | 149 | 514 | 569 | 258 | 728 | 447 |
| 14 | 768 | 338 | 170 | 470 | 600 | 140 | 192 | 399 | 333 | 390 | 836 | 271 |
| 15 | 768 | 358 | 150 | 470 | 470 | 130 | 225 | 382 | 152 | 661 | 872 | 98 |
| 16 | 761 | 342 | 263 | 490 | 400 | 130 | 195 | 701 | 106 | 617 | 761 | 64 |
| 17 | 663 | 319 | 250 | 620 | 690 | 120 | 225 | 528 | 104 | 946 | 733 | 307 |
| 18 | 424 | 308 | 288 | 600 | 1030 | 120 | 241 | 412 | 98 | 824 | 790 | 1100 |
| 19 | 526 | 304 | 290 | 560 | 1360 | 130 | 204 | 345 | 365 | 461 | 790 | 1100 |
| 20 | 608 | 301 | 320 | 500 | 2690 | 130 | 192 | 289 | 261 | 403 | 878 | 499 |
| 21 | 630 | 253 | 290 | 500 | 2250 | 120 | 175 | 244 | 126 | 110 | 952 | 326 |
| 22 | 603 | 319 | 330 | 539 | 1350 | 114 | 162 | 207 | 238 | 67 | 1030 | 382 |
| 23 | 613 | 170 | 330 | 514 | 958 | 100 | 195 | 178 | 162 | 241 | 915 | 353 |
| 24 | 556 | 652 | 400 | 576 | 1230 | 98 | 337 | 154 | 119 | 744 | 902 | 238 |
| 25 | 157 | 1020 | 410 | 611 | 819 | 96 | 365 | 140 | 114 | 908 | 927 | 854 |
| 26 | 531 | 608 | 400 | 502 | 656 | 90 | 326 | 140 | 264 | 480 | 952 | 1020 |
| 27 | 263 | 433 | 320 | 521 | 504 | 90 | 292 | 132 | 420 | 357 | 939 | 369 |
| 28 | 201 | 424 | 290 | 521 | 429 | 88 | 275 | 117 | 213 | 353 | 1010 | 157 |
| 29 | 276 | 437 | 240 | 566 | --- | 85 | 813 | 110 | 88 | 407 | 1020 | 137 |
| 30 | 429 | 338 | 250 | 561 | --- | 92 | 1290 | 121 | 81 | 489 | 884 | 162 |
| 31 | 350 | --- | 310 | 574 | --- | 128 | --- | 147 | --- | 854 | 927 | --- |
| TOTAL | 22434 | 12459 | 9443 | 14485 | 24851 | 4886 | 8195 | 9367 | 5321 | 13453 | 25373 | 16524 |
| MEAN | 724 | 415 | 305 | 467 | 888 | 158 | 273 | 302 | 177 | 434 | 818 | 551 |
| MAX | 1190 | 1020 | 691 | 620 | 2930 | 403 | 1290 | 784 | 569 | 946 | 1030 | 1100 |
| MIN | 157 | 170 | 150 | 300 | 110 | 85 | 135 | 110 | 81 | 67 | 523 | 64 |

CAL YR 1980 TOTAL 257129 MEAN 703 MAX 3740 MIN 86
WTR YR 1981 TOTAL 166791 MEAN 457 MAX 2930 MIN 64

## 01426500 WEST BRANCH DELAWARE RIVER AT HALE EDDY, NY--Continued

### WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1958-59, 1968 to current year.
CHEMICAL DATA: 1958-59 (d), 1970 (b), 1971-74 (d), 1975 (c).
MINOR ELEMENTS DATA: 1971-74 (a).
ORGANIC DATA: OC--1974 (a), 1975 (c).
NUTRIENT DATA: 1971-74 (d), 1975 (c).
BIOLOGICAL DATA:
Bacteria--1971, 1973 (c); 1974 (d); 1975 (c).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1967 to current year (no winter record for water years 1969-77).

INSTRUMENTATION.--Temperature recorder since October 1967.

REMARKS.--Water temperature is affected by release of water from upstream reservoir. No record July 25 to Aug. 19, due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1968-77, 1979-81), 30.5°C July 22, 23, 1972, June 16, 1981; minimum (water years 1968, 1978-81), freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 30.5°C June 16; minimum, freezing point on several days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 18.0 | 15.0 | 16.0 | 8.0 | 6.5 | 7.0 | 5.5 | 3.5 | 4.5 | .0 | .0 | .0 |
| 2 | 16.0 | 15.0 | 15.5 | 7.5 | 6.5 | 7.0 | 7.0 | 5.0 | 6.0 | .0 | .0 | .0 |
| 3 | 17.0 | 15.0 | 16.0 | 10.0 | 6.5 | 8.0 | 6.5 | .5 | 3.0 | .0 | .0 | .0 |
| 4 | 16.5 | 15.0 | 15.5 | 9.5 | 8.0 | 8.5 | .5 | .0 | .5 | .0 | .0 | .0 |
| 5 | 17.5 | 15.0 | 15.5 | 9.0 | 7.0 | 8.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 6 | 17.5 | 14.5 | 15.5 | 9.0 | 6.0 | 7.5 | .5 | .0 | .5 | .0 | .0 | .0 |
| 7 | 17.0 | 15.5 | 16.0 | 10.5 | 8.0 | 9.5 | 1.5 | .0 | 1.0 | .0 | .0 | .0 |
| 8 | 18.0 | 15.5 | 16.5 | 9.5 | 7.0 | 9.0 | 5.0 | 1.5 | 3.0 | .0 | .0 | .0 |
| 9 | 18.0 | 15.0 | 16.0 | 7.5 | 6.0 | 6.5 | 5.0 | 4.0 | 4.5 | .0 | .0 | .0 |
| 10 | 17.0 | 14.0 | 15.5 | 7.5 | 5.0 | 7.0 | 4.0 | 2.5 | 3.0 | .0 | .0 | .0 |
| 11 | 17.0 | 15.0 | 16.0 | 5.0 | 4.5 | 5.0 | 2.5 | .0 | 1.0 | .0 | .0 | .0 |
| 12 | 15.5 | 15.0 | 15.0 | 5.0 | 4.5 | 5.0 | .5 | .0 | .5 | .0 | .0 | .0 |
| 13 | 15.0 | 13.5 | 14.5 | 8.0 | 5.0 | 6.5 | 1.5 | .0 | .5 | .0 | .0 | .0 |
| 14 | 15.5 | 13.5 | 14.0 | 7.0 | 6.5 | 7.0 | .5 | .5 | .5 | .0 | .0 | .0 |
| 15 | 14.0 | 14.0 | 14.0 | 6.5 | 6.0 | 6.0 | .5 | .0 | .5 | .0 | .0 | .0 |
| 16 | 16.0 | 14.0 | 14.5 | 6.0 | 4.0 | 5.0 | .5 | .0 | .5 | .5 | .0 | .0 |
| 17 | 17.0 | 14.0 | 15.5 | 4.5 | .5 | 3.0 | 1.0 | .5 | .5 | .5 | .0 | .0 |
| 18 | 15.5 | 14.0 | 15.0 | 3.0 | .5 | 1.5 | .5 | .5 | .5 | 1.0 | .0 | .5 |
| 19 | 15.5 | 13.0 | 14.0 | 4.0 | 1.5 | 2.5 | .5 | .5 | .5 | 2.5 | .5 | 1.5 |
| 20 | 13.0 | 12.0 | 12.5 | 6.0 | 3.5 | 4.5 | .5 | .5 | .5 | 2.5 | .0 | 1.0 |
| 21 | 13.5 | 12.0 | 12.5 | 4.5 | 1.0 | 3.0 | .5 | .5 | .5 | 1.5 | .0 | .5 |
| 22 | 13.0 | 11.5 | 12.0 | 5.5 | 4.0 | 5.0 | .5 | .5 | .5 | 1.5 | .0 | .5 |
| 23 | 14.0 | 11.0 | 12.0 | 4.0 | 1.5 | 3.0 | .5 | .0 | .5 | 2.5 | 1.0 | 1.5 |
| 24 | 13.5 | 10.5 | 11.5 | 4.5 | 3.0 | 4.0 | .0 | .0 | .0 | 1.5 | .5 | 1.0 |
| 25 | 10.5 | 9.0 | 10.0 | 4.0 | 3.0 | 3.5 | .0 | .0 | .0 | 3.0 | .5 | 1.5 |
| 26 | 9.5 | 6.5 | 7.5 | 3.5 | 2.0 | 3.0 | .0 | .0 | .0 | 2.5 | 1.0 | 1.5 |
| 27 | 9.0 | 6.0 | 7.5 | 3.5 | 2.5 | 2.5 | .0 | .0 | .0 | 2.5 | 1.5 | 2.0 |
| 28 | 7.5 | 6.5 | 7.0 | 4.0 | 3.0 | 3.0 | .0 | .0 | .0 | 2.0 | .5 | 1.5 |
| 29 | 8.5 | 5.5 | 6.5 | 4.0 | 3.5 | 3.5 | .0 | .0 | .0 | 2.0 | .0 | 1.0 |
| 30 | 9.0 | 7.0 | 8.5 | 4.0 | 3.0 | 3.5 | .0 | .0 | .0 | 1.0 | .0 | .0 |
| 31 | 9.5 | 6.0 | 8.0 | --- | --- | --- | .0 | .0 | .0 | 2.0 | .0 | .5 |
| MONTH | 18.0 | 5.5 | 13.0 | 10.5 | .5 | 5.5 | 7.0 | .0 | 1.0 | 3.0 | .0 | .5 |

### 01426500 WEST BRANCH DELAWARE RIVER AT HALE EDDY, NY--Continued

### TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | 1.0 | .0 | .0 | 3.0 | 2.5 | 3.0 | 12.5 | 7.5 | 10.5 | 13.0 | 8.0 | 10.5 |
| 2 | 2.0 | .0 | 1.0 | 4.0 | 2.5 | 3.0 | 12.0 | 8.0 | 9.5 | 11.5 | 9.0 | 10.0 |
| 3 | .0 | .0 | .0 | 2.5 | .5 | 1.0 | 13.0 | 6.0 | 10.0 | 15.5 | 7.0 | 11.0 |
| 4 | .0 | .0 | .0 | 2.0 | .5 | 1.0 | 13.0 | 10.5 | 11.5 | 17.5 | 9.0 | 13.5 |
| 5 | .0 | .0 | .0 | 2.0 | 1.0 | 1.5 | 13.0 | 10.5 | 12.0 | 19.0 | 11.5 | 15.5 |
| 6 | .0 | .0 | .0 | 4.0 | .5 | 2.0 | 10.5 | 5.0 | 7.5 | 16.0 | 9.5 | 13.0 |
| 7 | .0 | .0 | .0 | 1.0 | .5 | 1.0 | 12.5 | 3.5 | 8.0 | 15.5 | 7.0 | 11.0 |
| 8 | .0 | .0 | .0 | 2.5 | 1.0 | 2.0 | 15.0 | 6.5 | 11.0 | 17.5 | 9.0 | 13.0 |
| 9 | .0 | .0 | .0 | 5.0 | 2.0 | 3.5 | 13.0 | 9.5 | 11.5 | 18.0 | 10.5 | 14.0 |
| 10 | .0 | .0 | .0 | 5.5 | 3.0 | 4.0 | 15.5 | 7.0 | 11.0 | 21.0 | 12.0 | 16.5 |
| 11 | .0 | .0 | .0 | 6.0 | 3.0 | 4.0 | 12.5 | 9.5 | 11.0 | 17.0 | 15.0 | 16.0 |
| 12 | .0 | .0 | .0 | 7.0 | 2.0 | 4.0 | 14.5 | 10.5 | 12.0 | 14.5 | 11.5 | 13.5 |
| 13 | .5 | .0 | .0 | 7.0 | 4.0 | 5.0 | 14.5 | 9.0 | 11.5 | 15.5 | 9.5 | 12.5 |
| 14 | 1.5 | .0 | .0 | 4.0 | .5 | 2.0 | 9.5 | 6.5 | 8.0 | 18.5 | 10.5 | 14.5 |
| 15 | 2.0 | .0 | .5 | 7.0 | .5 | 3.5 | 10.5 | 4.5 | 7.5 | 19.0 | 14.5 | 16.0 |
| 16 | 3.0 | .0 | 1.5 | 5.0 | .5 | 3.5 | 13.5 | 4.5 | 9.0 | 15.0 | 11.5 | 13.5 |
| 17 | 3.5 | 1.0 | 2.0 | 2.0 | .5 | 1.0 | 9.5 | 7.5 | 9.0 | 16.5 | 10.0 | 13.0 |
| 18 | 4.0 | 1.5 | 2.5 | 2.0 | .5 | 1.0 | 15.5 | 9.0 | 12.0 | 15.0 | 9.5 | 12.5 |
| 19 | 4.0 | 1.5 | 3.0 | 1.0 | .5 | .5 | 13.0 | 8.5 | 11.0 | 14.5 | 9.0 | 12.0 |
| 20 | 4.0 | 3.5 | 3.5 | 1.0 | .5 | .5 | 10.5 | 6.0 | 9.0 | 18.0 | 9.5 | 13.5 |
| 21 | 5.0 | 3.5 | 4.0 | .5 | .5 | .5 | 11.0 | 4.0 | 7.5 | 20.0 | 11.0 | 15.5 |
| 22 | 6.5 | 4.5 | 5.5 | 3.5 | .5 | 1.5 | 14.0 | 5.0 | 9.5 | 21.0 | 13.5 | 17.0 |
| 23 | 6.0 | 5.0 | 5.5 | 6.5 | 1.0 | 4.0 | 10.0 | 7.5 | 8.5 | 21.5 | 13.5 | 17.5 |
| 24 | 7.0 | 5.0 | 6.0 | 7.0 | 3.0 | 5.0 | 10.0 | 7.5 | 9.0 | 22.0 | 14.0 | 18.0 |
| 25 | 5.5 | 3.5 | 4.0 | 7.5 | 4.0 | 5.5 | 8.5 | 6.0 | 7.0 | 23.5 | 16.5 | 20.0 |
| 26 | 3.5 | 3.0 | 3.0 | 11.0 | 2.5 | 6.5 | 10.5 | 6.0 | 8.0 | 24.5 | 18.5 | 21.5 |
| 27 | 5.5 | 2.0 | 3.5 | 7.0 | 4.5 | 6.5 | 15.0 | 8.0 | 11.5 | 24.5 | 19.5 | 21.5 |
| 28 | 3.5 | 2.0 | 2.5 | 11.5 | 2.5 | 7.0 | 13.0 | 10.0 | 11.5 | 21.5 | 18.5 | 20.0 |
| 29 | --- | --- | --- | 14.0 | 5.0 | 9.5 | 13.0 | 11.0 | 12.0 | 22.5 | 18.5 | 20.5 |
| 30 | --- | --- | --- | 10.5 | 9.0 | 10.0 | 12.0 | 9.5 | 10.5 | 24.5 | 19.0 | 22.0 |
| 31 | --- | --- | --- | 11.5 | 9.0 | 10.0 | --- | --- | --- | 23.5 | 19.0 | 21.0 |
| MONTH | 7.0 | .0 | 1.5 | 14.0 | .5 | 3.5 | 15.5 | 3.5 | 10.0 | 24.5 | 7.0 | 15.5 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 24.5 | 15.5 | 20.0 | 27.5 | 22.5 | 25.0 | --- | --- | --- | 15.5 | 12.0 | 13.5 |
| 2 | 20.0 | 16.0 | 17.5 | 25.0 | 18.0 | 22.0 | --- | --- | --- | 13.5 | 12.5 | 13.0 |
| 3 | 16.5 | 15.0 | 16.0 | 27.5 | 11.0 | 22.0 | --- | --- | --- | 13.5 | 12.5 | 13.0 |
| 4 | 23.5 | 16.0 | 19.5 | 14.5 | 10.0 | 12.0 | --- | --- | --- | 13.0 | 12.5 | 13.0 |
| 5 | 25.5 | 19.0 | 21.5 | 16.5 | 10.5 | 13.5 | --- | --- | --- | 14.0 | 12.5 | 13.0 |
| 6 | 26.0 | 20.0 | 22.5 | 24.5 | 16.5 | 20.0 | --- | --- | --- | 14.0 | 13.0 | 13.0 |
| 7 | 22.0 | 18.5 | 20.0 | 29.0 | 20.5 | 24.5 | --- | --- | --- | 16.5 | 13.0 | 14.5 |
| 8 | 25.0 | 16.0 | 20.5 | 28.0 | 21.5 | 24.5 | --- | --- | --- | 15.0 | 14.0 | 14.5 |
| 9 | 25.0 | 20.5 | 22.5 | 24.0 | 19.5 | 21.5 | --- | --- | --- | 17.0 | 13.0 | 15.0 |
| 10 | 22.5 | 19.0 | 21.0 | 20.5 | 12.5 | 17.5 | --- | --- | --- | 18.5 | 12.5 | 16.0 |
| 11 | 25.5 | 17.5 | 21.5 | 18.5 | 10.0 | 13.5 | --- | --- | --- | 17.5 | 13.5 | 15.5 |
| 12 | 21.5 | 12.0 | 17.5 | 21.0 | 11.0 | 15.5 | --- | --- | --- | 16.5 | 13.0 | 14.5 |
| 13 | 15.5 | 10.0 | 12.5 | 20.5 | 13.5 | 17.0 | --- | --- | --- | 20.0 | 12.5 | 16.0 |
| 14 | 14.0 | 11.5 | 12.5 | 19.5 | 13.0 | 17.5 | --- | --- | --- | 18.5 | 13.5 | 16.0 |
| 15 | 24.0 | 14.5 | 19.0 | 17.0 | 11.0 | 13.5 | --- | --- | --- | 18.5 | 17.0 | 17.5 |
| 16 | 30.5 | 22.0 | 26.0 | 17.5 | 10.0 | 13.5 | --- | --- | --- | 19.0 | 15.5 | 17.0 |
| 17 | 26.5 | 22.5 | 25.0 | 15.0 | 9.5 | 12.0 | --- | --- | --- | 17.5 | 14.0 | 16.5 |
| 18 | 28.5 | 19.5 | 24.0 | 16.5 | 10.0 | 12.5 | --- | --- | --- | 15.5 | 13.5 | 14.5 |
| 19 | 23.5 | 13.5 | 18.0 | 18.0 | 10.0 | 14.0 | --- | --- | --- | 15.5 | 13.5 | 14.0 |
| 20 | 18.0 | 14.0 | 16.0 | 15.5 | 11.5 | 13.0 | 16.0 | 10.0 | 12.5 | 15.5 | 13.0 | 14.0 |
| 21 | 21.5 | 15.5 | 18.0 | 23.0 | 16.0 | 19.5 | 15.5 | 10.0 | 12.0 | 15.0 | 12.0 | 13.5 |
| 22 | 21.5 | 16.0 | 19.0 | 26.0 | 20.5 | 23.0 | 12.5 | 10.5 | 11.5 | 14.5 | 13.5 | 14.0 |
| 23 | 22.5 | 18.0 | 20.0 | 21.5 | 16.0 | 20.0 | 16.0 | 10.5 | 12.5 | 13.0 | 11.5 | 12.5 |
| 24 | 25.5 | 17.5 | 21.5 | 16.0 | 10.0 | 12.5 | 14.0 | 10.5 | 12.0 | 11.5 | 10.5 | 11.0 |
| 25 | 23.5 | 21.0 | 22.5 | --- | --- | --- | 14.5 | 11.0 | 12.5 | 17.0 | 11.0 | 14.0 |
| 26 | 21.0 | 13.0 | 16.5 | --- | --- | --- | 15.5 | 10.5 | 12.5 | 16.0 | 13.5 | 14.5 |
| 27 | 18.5 | 10.0 | 14.0 | --- | --- | --- | 14.5 | 10.5 | 12.0 | 19.0 | 14.0 | 16.5 |
| 28 | 23.5 | 11.0 | 17.0 | --- | --- | --- | 14.0 | 11.5 | 12.5 | 17.0 | 12.0 | 14.5 |
| 29 | 27.5 | 18.0 | 22.5 | --- | --- | --- | 13.5 | 11.5 | 12.5 | 14.0 | 9.5 | 12.0 |
| 30 | 30.0 | 22.0 | 25.5 | --- | --- | --- | 14.5 | 12.0 | 13.0 | 12.5 | 10.0 | 11.5 |
| 31 | --- | --- | --- | --- | --- | --- | 13.0 | 12.0 | 13.0 | --- | --- | --- |
| MONTH | 30.5 | 10.0 | 19.5 | 29.0 | 9.5 | 17.5 | 16.0 | 10.0 | 12.5 | 20.0 | 9.5 | 14.5 |

## 01427207 DELAWARE RIVER AT LORDVILLE, NY

LOCATION.--Lat 41°52'05", long 75°12'50", Delaware County, Hydrologic Unit 02040101, at Lordville-Equinunk Interstate Bridge at Lordville, 50 ft (15 m) downstream from Humphries Brook, and 6.5 mi (10.4 km) southeast of Hancock.

DRAINAGE AREA.--1,587 $mi^2$ (4,110 $km^2$).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1967 to August 1971, June 1973 to current year.

INSTRUMENTATION.--Temperature recorder since October 1967.

REMARKS.--No record Nov. 17 to Dec. 16, Feb. 3 to Mar. 26, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1968-70, 73, 1975-81) 30.5°C June 16, 1976, July 10, 1981; minimum (water years 1968-71, 74, 77, 78, 80-81), freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 30.5°C July 10, minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 16.0 | 14.5 | 15.0 | 6.0 | 5.0 | 5.5 | --- | --- | --- | .0 | .0 | .0 |
| 2 | 15.5 | 14.0 | 15.0 | 5.5 | 5.0 | 5.5 | --- | --- | --- | .0 | .0 | .0 |
| 3 | 14.5 | 14.0 | 14.0 | 5.5 | 4.5 | 5.0 | --- | --- | --- | .0 | .0 | .0 |
| 4 | 14.5 | 13.5 | 14.0 | 6.5 | 5.5 | 6.0 | --- | --- | --- | .0 | .0 | .0 |
| 5 | 14.0 | 12.5 | 13.0 | 7.0 | 6.0 | 6.5 | --- | --- | --- | .0 | .0 | .0 |
| 6 | 14.0 | 12.0 | 13.0 | 6.0 | 4.5 | 5.5 | --- | --- | --- | .0 | .0 | .0 |
| 7 | 14.0 | 13.0 | 13.5 | 8.0 | 5.5 | 6.5 | --- | --- | --- | .0 | .0 | .0 |
| 8 | 14.5 | 12.5 | 13.5 | 9.0 | 7.0 | 8.0 | --- | --- | --- | .0 | .0 | .0 |
| 9 | 15.0 | 13.5 | 14.0 | 7.0 | 5.0 | 6.0 | --- | --- | --- | .0 | .0 | .0 |
| 10 | 13.5 | 11.5 | 12.5 | 5.5 | 4.5 | 5.5 | --- | --- | --- | .0 | .0 | .0 |
| 11 | 13.5 | 12.5 | 13.0 | 4.5 | 3.0 | 3.5 | --- | --- | --- | .0 | .0 | .0 |
| 12 | 13.0 | 12.0 | 12.5 | 3.0 | 2.0 | 2.5 | --- | --- | --- | .0 | .0 | .0 |
| 13 | 12.0 | 10.0 | 11.0 | 4.5 | 2.5 | 3.5 | --- | --- | --- | .0 | .0 | .0 |
| 14 | 11.0 | 9.0 | 10.0 | 5.5 | 4.5 | 5.0 | --- | --- | --- | .0 | .0 | .0 |
| 15 | 10.0 | 10.0 | 10.0 | 5.5 | 5.0 | 5.5 | --- | --- | --- | .0 | .0 | .0 |
| 16 | 11.5 | 9.5 | 10.5 | 5.0 | 4.0 | 4.5 | --- | --- | --- | .0 | .0 | .0 |
| 17 | 13.5 | 11.0 | 12.0 | --- | --- | --- | .0 | .0 | .0 | .0 | .0 | .0 |
| 18 | 13.5 | 13.0 | 13.0 | --- | --- | --- | .0 | .0 | .0 | .0 | .0 | .0 |
| 19 | 13.0 | 11.5 | 12.5 | --- | --- | --- | .0 | .0 | .0 | .0 | .0 | .0 |
| 20 | 12.0 | 9.5 | 11.0 | --- | --- | --- | .0 | .0 | .0 | .0 | .0 | .0 |
| 21 | 9.5 | 9.0 | 9.0 | --- | --- | --- | .0 | .0 | .0 | .0 | .0 | .0 |
| 22 | 9.0 | 8.5 | 9.0 | --- | --- | --- | .0 | .0 | .0 | .0 | .0 | .0 |
| 23 | 9.0 | 7.0 | 8.0 | --- | --- | --- | .0 | .0 | .0 | .0 | .0 | .0 |
| 24 | 8.5 | 6.5 | 7.5 | --- | --- | --- | .0 | .0 | .0 | .0 | .0 | .0 |
| 25 | 8.5 | 7.0 | 8.0 | --- | --- | --- | .0 | .0 | .0 | .0 | .0 | .0 |
| 26 | 8.0 | 7.0 | 7.5 | --- | --- | --- | .0 | .0 | .0 | .0 | .0 | .0 |
| 27 | 7.5 | 6.0 | 6.5 | --- | --- | --- | .0 | .0 | .0 | .0 | .0 | .0 |
| 28 | 7.0 | 6.5 | 6.5 | --- | --- | --- | .0 | .0 | .0 | .0 | .0 | .0 |
| 29 | 6.0 | 5.0 | 5.5 | --- | --- | --- | .0 | .0 | .0 | .0 | .0 | .0 |
| 30 | 6.0 | 5.0 | 5.5 | --- | --- | --- | .0 | .0 | .0 | .0 | .0 | .0 |
| 31 | 6.5 | 4.5 | 5.5 | --- | --- | --- | .0 | .0 | .0 | .0 | .0 | .0 |
| MONTH | 16.0 | 4.5 | 10.5 | 9.0 | 2.0 | 5.5 | .0 | .0 | .0 | .0 | .0 | .0 |

## 01427207 DELAWARE RIVER AT LORDVILLE, NY--Continued

### TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | .0 | .0 | .0 | --- | --- | --- | 11.5 | 9.0 | 10.0 | 12.0 | 10.0 | 11.0 |
| 2 | .5 | .0 | .0 | --- | --- | --- | 11.5 | 9.5 | 10.5 | 12.5 | 10.5 | 11.5 |
| 3 | --- | --- | --- | --- | --- | --- | 11.5 | 8.0 | 10.0 | 13.5 | 9.5 | 11.5 |
| 4 | --- | --- | --- | --- | --- | --- | 12.5 | 11.0 | 11.5 | 16.0 | 11.0 | 13.5 |
| 5 | --- | --- | --- | --- | --- | --- | 12.0 | 11.0 | 12.0 | 17.0 | 13.5 | 15.5 |
| 6 | --- | --- | --- | --- | --- | --- | 11.0 | 7.5 | 9.0 | 17.0 | 13.0 | 15.5 |
| 7 | --- | --- | --- | --- | --- | --- | 10.0 | 5.5 | 7.5 | 14.0 | 10.5 | 12.0 |
| 8 | --- | --- | --- | --- | --- | --- | 12.0 | 7.5 | 10.0 | 16.0 | 11.0 | 13.5 |
| 9 | --- | --- | --- | --- | --- | --- | 11.5 | 10.5 | 11.0 | 17.0 | 12.5 | 14.5 |
| 10 | --- | --- | --- | --- | --- | --- | 12.5 | 8.5 | 10.5 | 18.0 | 13.5 | 16.0 |
| 11 | --- | --- | --- | --- | --- | --- | 11.5 | 10.5 | 11.0 | 17.5 | 15.0 | 16.0 |
| 12 | --- | --- | --- | --- | --- | --- | 13.0 | 11.0 | 11.5 | 15.5 | 12.0 | 13.0 |
| 13 | --- | --- | --- | --- | --- | --- | 13.5 | 10.5 | 12.0 | 13.0 | 10.5 | 12.0 |
| 14 | --- | --- | --- | --- | --- | --- | 11.5 | 8.5 | 9.5 | 14.5 | 11.5 | 13.0 |
| 15 | --- | --- | --- | --- | --- | --- | 9.0 | 6.5 | 7.5 | 15.5 | 14.0 | 15.0 |
| 16 | --- | --- | --- | --- | --- | --- | 10.5 | 6.0 | 8.5 | 15.0 | 12.5 | 13.5 |
| 17 | --- | --- | --- | --- | --- | --- | 9.5 | 9.0 | 9.0 | 14.0 | 11.5 | 12.5 |
| 18 | --- | --- | --- | --- | --- | --- | 13.0 | 9.0 | 11.0 | 13.5 | 11.0 | 12.5 |
| 19 | --- | --- | --- | --- | --- | --- | 12.0 | 10.0 | 11.5 | 13.5 | 11.0 | 12.0 |
| 20 | --- | --- | --- | --- | --- | --- | 11.5 | 9.0 | 10.5 | 15.5 | 11.0 | 13.0 |
| 21 | --- | --- | --- | --- | --- | --- | 10.0 | 6.5 | 8.0 | 16.5 | 12.5 | 14.5 |
| 22 | --- | --- | --- | --- | --- | --- | 11.5 | 6.5 | 9.0 | 18.5 | 14.5 | 16.5 |
| 23 | --- | --- | --- | --- | --- | --- | 10.0 | 8.0 | 9.0 | 19.5 | 15.5 | 17.5 |
| 24 | --- | --- | --- | --- | --- | --- | 9.5 | 8.0 | 9.0 | 20.0 | 16.0 | 18.0 |
| 25 | --- | --- | --- | --- | --- | --- | 9.0 | 7.5 | 8.0 | 22.0 | 17.5 | 19.5 |
| 26 | --- | --- | --- | --- | --- | --- | 10.0 | 7.0 | 8.5 | 23.0 | 20.0 | 21.5 |
| 27 | --- | --- | --- | 7.5 | 6.0 | 7.0 | 13.0 | 9.0 | 10.5 | 23.5 | 20.5 | 22.0 |
| 28 | --- | --- | --- | 10.5 | 4.5 | 7.0 | 12.5 | 11.0 | 11.5 | 22.0 | 20.5 | 21.5 |
| 29 | --- | --- | --- | 12.5 | 6.5 | 9.0 | 13.0 | 11.5 | 12.0 | 22.0 | 20.0 | 21.0 |
| 30 | --- | --- | --- | 10.5 | 9.5 | 10.0 | 12.5 | 11.0 | 11.5 | 24.0 | 21.5 | 22.5 |
| 31 | --- | --- | --- | 11.0 | 9.5 | 10.5 | --- | --- | --- | 23.5 | 21.0 | 22.5 |
| MONTH | .5 | .0 | .0 | 12.5 | 4.5 | 8.5 | 13.5 | 5.5 | 10.0 | 24.0 | 9.5 | 15.5 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 23.0 | 19.0 | 21.0 | 25.5 | 23.5 | 24.5 | 20.0 | 18.0 | 19.0 | 18.0 | 16.0 | 17.0 |
| 2 | 21.5 | 18.5 | 20.0 | 25.5 | 23.5 | 24.5 | 19.5 | 17.0 | 18.5 | 18.0 | 17.0 | 17.5 |
| 3 | 18.5 | 17.0 | 17.5 | 27.0 | 23.5 | 25.0 | 21.5 | 18.5 | 20.0 | 17.0 | 16.5 | 16.5 |
| 4 | 21.5 | 17.0 | 19.0 | 25.5 | 19.0 | 22.0 | 22.0 | 19.0 | 20.5 | 16.5 | 15.5 | 16.0 |
| 5 | 24.0 | 19.5 | 21.5 | 21.5 | 19.0 | 20.0 | 21.0 | 19.5 | 20.0 | 16.0 | 15.0 | 15.5 |
| 6 | 25.0 | 21.5 | 23.0 | 26.0 | 20.5 | 23.0 | 20.0 | 17.5 | 19.0 | 16.0 | 15.5 | 15.5 |
| 7 | 23.0 | 20.0 | 21.5 | 28.5 | 24.0 | 26.0 | 21.0 | 18.0 | 19.5 | 18.0 | 15.5 | 16.5 |
| 8 | 23.5 | 18.5 | 20.5 | 29.5 | 25.5 | 27.5 | 19.5 | 17.0 | 18.0 | 18.5 | 17.0 | 18.0 |
| 9 | 24.0 | 21.0 | 22.0 | 30.0 | 26.5 | 28.0 | 21.0 | 17.0 | 18.5 | 18.0 | 16.5 | 17.5 |
| 10 | 22.5 | 20.5 | 21.5 | 30.5 | 27.5 | 28.5 | 24.0 | 20.0 | 22.0 | 18.5 | 15.5 | 17.0 |
| 11 | 23.5 | 19.5 | 21.5 | 28.0 | 22.5 | 24.5 | 23.0 | 21.0 | 21.5 | 20.5 | 17.0 | 18.5 |
| 12 | 25.0 | 20.5 | 22.5 | 25.0 | 21.5 | 23.0 | 22.5 | 20.5 | 21.0 | 20.0 | 18.5 | 19.5 |
| 13 | 24.0 | 22.0 | 22.5 | 27.0 | 23.0 | 25.0 | 21.0 | 19.0 | 20.0 | 19.5 | 17.0 | 18.5 |
| 14 | 22.0 | 18.0 | 19.5 | 26.0 | 24.0 | 25.0 | 20.5 | 18.5 | 19.0 | 22.0 | 18.0 | 20.0 |
| 15 | 22.5 | 17.5 | 19.5 | 24.0 | 21.5 | 22.5 | 19.0 | 17.0 | 18.0 | 20.5 | 19.5 | 20.0 |
| 16 | 27.0 | 22.5 | 24.5 | 23.0 | 19.5 | 21.5 | 18.5 | 16.5 | 17.5 | 20.0 | 18.5 | 19.0 |
| 17 | 26.5 | 24.5 | 25.5 | 22.0 | 19.5 | 20.5 | 18.5 | 16.0 | 17.5 | 19.0 | 17.5 | 18.0 |
| 18 | 27.0 | 22.0 | 24.0 | 20.0 | 17.5 | 19.0 | 19.0 | 15.5 | 17.0 | 17.5 | 16.5 | 17.0 |
| 19 | 26.5 | 23.0 | 24.5 | 21.5 | 19.0 | 20.0 | 19.5 | 16.5 | 18.0 | 16.5 | 15.5 | 16.0 |
| 20 | 25.0 | 23.0 | 24.0 | 21.5 | 20.5 | 21.0 | 19.5 | 17.0 | 18.0 | 15.5 | 15.0 | 15.0 |
| 21 | 23.0 | 21.5 | 22.0 | 23.0 | 20.0 | 21.5 | 19.0 | 16.5 | 18.0 | 15.5 | 14.0 | 14.5 |
| 22 | 23.0 | 21.0 | 21.5 | 25.5 | 22.5 | 23.5 | 18.5 | 15.5 | 16.5 | 15.5 | 15.0 | 15.0 |
| 23 | 21.5 | 20.0 | 21.0 | 26.0 | 21.5 | 23.5 | 18.5 | 15.0 | 16.5 | 15.0 | 12.5 | 14.0 |
| 24 | 23.0 | 19.5 | 21.0 | 24.0 | 21.5 | 23.0 | 18.0 | 16.0 | 17.0 | 12.5 | 11.5 | 12.0 |
| 25 | 23.0 | 21.0 | 22.0 | 21.5 | 18.0 | 19.0 | 18.5 | 15.5 | 17.0 | 13.5 | 10.5 | 12.0 |
| 26 | 22.0 | 18.0 | 19.5 | 18.0 | 17.0 | 17.5 | 19.0 | 16.0 | 17.5 | 15.0 | 13.5 | 14.5 |
| 27 | 21.0 | 16.5 | 18.5 | 23.0 | 17.5 | 20.5 | 18.0 | 17.0 | 17.5 | 16.5 | 14.0 | 15.0 |
| 28 | 23.5 | 18.0 | 20.5 | 21.5 | 20.0 | 21.0 | 17.5 | 16.5 | 17.0 | 16.0 | 14.0 | 15.0 |
| 29 | 25.5 | 20.5 | 22.5 | 20.0 | 18.5 | 19.0 | 16.5 | 15.5 | 16.0 | 15.0 | 12.0 | 13.0 |
| 30 | 27.0 | 22.5 | 24.5 | 20.5 | 16.5 | 18.5 | 17.5 | 15.5 | 16.5 | 12.5 | 11.0 | 12.0 |
| 31 | --- | --- | --- | 22.0 | 18.5 | 20.0 | 17.5 | 17.0 | 17.5 | --- | --- | --- |
| MONTH | 27.0 | 16.5 | 21.5 | 30.5 | 16.5 | 22.5 | 24.0 | 15.0 | 18.5 | 22.0 | 10.5 | 16.0 |

## 01427500 CALLICOON CREEK AT CALLICOON, NY

LOCATION.--Lat 41°45'39", long 75°02'55", Sullivan County, Hydrologic Unit 02040101, on right bank 0.7 mi (1.1 km) southeast of Callicoon, 0.9 mi (1.4 km) upstream from mouth, and 1.0 mi (1.6 km) west of Hortonville.

DRAINAGE AREA.--111 mi$^2$ (287 km$^2$).

PERIOD OF RECORD.--August 1940 to current year.

GAGE.--Water-stage recorder. Concrete control since July 1944. Datum of gage is 759.84 ft (231.599 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Occasional regulation by small pond above station.

AVERAGE DISCHARGE.--41 years, 178 ft$^3$/s (5.041 m$^3$/s), 21.78 in/yr (553 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,000 ft$^3$/s (453 m$^3$/s) Aug. 17, 1947, gage height, 9.68 ft (2.950 m), from rating curve extended above 5,100 ft$^3$/s (144 m$^3$/s) on basis of slope-area measurement of peak flow; minimum, 4.0 ft$^3$/s (0.11 m$^3$/s) July 26, 27, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,200 ft$^3$/s (62 m$^3$/s) and maximum (*):

| Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) | Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 2 | 1600 | 2,890 | 81.8 | 4.98 | 1.518 | May 12 | Unknown | b6,000 | 170 | Unknown | |
| Feb. 11 | 1600 | *a6,130 | 174 | *6.64 | 2.024 | May 16 | 0130 | 2,650 | 75.0 | 4.82 | 1.469 |
| Feb. 20 | 1745 | 3,410 | 96.6 | 5.30 | 1.615 | | | | | | |

a Maximum recorded; may have been higher during no gage-height record May 12.
b Estimated.

Minimum discharge, 6.9 ft$^3$/s (0.20 m$^3$/s) Nov. 18, gage height, 1.05 ft (0.320 m).

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 10 | 21 | 118 | 31 | 17 | 238 | 80 | 255 | 62 | 38 | 20 | 16 |
| 2 | 10 | 19 | 118 | 30 | 1200 | 208 | 256 | 209 | 64 | 50 | 19 | 14 |
| 3 | 11 | 17 | 183 | 30 | 500 | 178 | 147 | 176 | 72 | 48 | 18 | 14 |
| 4 | 11 | 16 | 110 | 29 | 250 | 153 | 115 | 150 | 87 | 46 | 18 | 13 |
| 5 | 10 | 15 | 96 | 29 | 170 | 146 | 119 | 133 | 66 | 60 | 21 | 12 |
| 6 | 10 | 15 | 92 | 28 | 140 | 136 | 160 | 122 | 58 | 60 | 21 | 13 |
| 7 | 9.4 | 15 | 88 | 27 | 120 | 124 | 123 | 111 | 52 | 50 | 18 | 16 |
| 8 | 9.4 | 21 | 86 | 27 | 110 | 116 | 107 | 98 | 47 | 56 | 24 | 16 |
| 9 | 8.8 | 26 | 84 | 26 | 100 | 113 | 111 | 90 | 50 | 83 | 24 | 31 |
| 10 | 8.8 | 39 | 136 | 26 | 96 | 107 | 154 | 83 | 48 | 71 | 19 | 20 |
| 11 | 10 | 31 | 90 | 25 | 2790 | 103 | 128 | 392 | 45 | 56 | 18 | 16 |
| 12 | 11 | 25 | 74 | 24 | 1560 | 99 | 118 | 3300 | 41 | 34 | 18 | 14 |
| 13 | 11 | 23 | 64 | 24 | 539 | 93 | 141 | 1120 | 44 | 25 | 17 | 12 |
| 14 | 10 | 21 | 54 | 24 | 350 | 86 | 296 | 579 | 81 | 23 | 16 | 12 |
| 15 | 9.4 | 20 | 45 | 23 | 280 | 78 | 350 | 684 | 134 | 22 | 16 | 11 |
| 16 | 10 | 19 | 41 | 23 | 250 | 72 | 226 | 1550 | 100 | 20 | 18 | 13 |
| 17 | 10 | 17 | 38 | 22 | 305 | 66 | 215 | 660 | 101 | 18 | 16 | 14 |
| 18 | 10 | 18 | 36 | 22 | 444 | 60 | 212 | 438 | 60 | 18 | 14 | 14 |
| 19 | 11 | 19 | 36 | 21 | 520 | 58 | 171 | 331 | 50 | 17 | 12 | 13 |
| 20 | 11 | 20 | 36 | 21 | 1870 | 56 | 148 | 261 | 46 | 41 | 11 | 13 |
| 21 | 11 | 21 | 35 | 20 | 1350 | 56 | 127 | 210 | 62 | 72 | 11 | 12 |
| 22 | 11 | 23 | 35 | 20 | 716 | 58 | 116 | 175 | 142 | 47 | 11 | 13 |
| 23 | 10 | 25 | 35 | 19 | 538 | 56 | 144 | 150 | 139 | 35 | 11 | 20 |
| 24 | 10 | 284 | 35 | 19 | 966 | 56 | 263 | 126 | 85 | 29 | 11 | 19 |
| 25 | 38 | 513 | 34 | 18 | 540 | 55 | 195 | 112 | 70 | 25 | 11 | 17 |
| 26 | 153 | 263 | 34 | 18 | 405 | 53 | 157 | 96 | 65 | 25 | 10 | 14 |
| 27 | 62 | 167 | 33 | 18 | 318 | 53 | 137 | 88 | 57 | 33 | 9.5 | 14 |
| 28 | 42 | 174 | 33 | 18 | 267 | 51 | 127 | 80 | 48 | 28 | 9.2 | 16 |
| 29 | 33 | 190 | 32 | 18 | --- | 51 | 334 | 80 | 47 | 30 | 9.3 | 14 |
| 30 | 26 | 142 | 32 | 17 | --- | 53 | 375 | 73 | 41 | 26 | 10 | 13 |
| 31 | 23 | --- | 31 | 17 | --- | 64 | --- | 71 | --- | 22 | 19 | --- |
| TOTAL | 620.8 | 2219 | 1994 | 714 | 16711 | 2896 | 5352 | 12003 | 2064 | 1208 | 480.0 | 449 |
| MEAN | 20.0 | 74.0 | 64.3 | 23.0 | 597 | 93.4 | 178 | 387 | 68.8 | 39.0 | 15.5 | 15.0 |
| MAX | 153 | 513 | 183 | 31 | 2790 | 238 | 375 | 3300 | 142 | 83 | 24 | 31 |
| MIN | 8.8 | 15 | 31 | 17 | 17 | 51 | 80 | 71 | 41 | 17 | 9.2 | 11 |
| CFSM | .18 | .67 | .58 | .21 | 5.38 | .84 | 1.60 | 3.49 | .62 | .35 | .14 | .14 |
| IN. | .21 | .74 | .67 | .24 | 5.60 | .97 | 1.79 | 4.02 | .69 | .40 | .16 | .15 |

CAL YR 1980 TOTAL 37720.1 MEAN 103 MAX 2140 MIN 8.3 CFSM .93 IN 12.64
WTR YR 1981 TOTAL 46710.8 MEAN 128 MAX 3300 MIN 8.8 CFSM 1.15 IN 15.65

## 01427510 DELAWARE RIVER AT CALLICOON, NY

LOCATION.--Lat 41°45'24", long 75°03'30", Wayne County, Pennsylvania, Hydrologic Unit 02040101, on right bank, 0.5 mi (0.8 km) downstream from Callicoon Creek, 0.5 mi (0.8 km) downstream from Interstate Bridge 7, and 0.8 mi (1.3 km) southeast of Callicoon. Water-quality sampling site at discharge station.

DRAINAGE AREA.--1,882 mi$^2$ (4,874 km$^2$).

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 750 ft (229 m), from topographic map (nearest 20 ft).

REMARKS.--Records good except those for winter periods, which are poor. Subsequent to September 1954, entire flow from 371 mi$^2$ (961 km$^2$) of drainage area controlled by Pepacton Reservoir (see Reservoirs in Delaware River Basin), and subsequent to October 1963, entire flow from 454 mi$^2$ (1,176 km$^2$) of drainage area controlled by Cannonsville Reservoir (see Reservoirs in Delaware River Basin). Part of flow from these reservoirs diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during period of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 75,300 ft$^3$/s (2,132 m$^3$/s) Feb. 12, 1981, result of ice jam release, gage height, 13.19 ft (4.020 m); minimum 335 ft$^3$/s (9.49 m$^3$/s) Sept. 13, 1977, gage height, 2.20 ft (0.671 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 75,300 ft$^3$/s (2,132 m$^3$/s) Feb. 12, result of ice jam release, gage height, 13.19 ft (4.020 m); minimum, 410 ft$^3$/s (11.6 m$^3$/s) Sept. 18, gage height, 2.32 ft (0.707 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1600 | 1220 | 1890 | 800 | 740 | 3380 | 851 | 3720 | 790 | 517 | 1220 | 1160 |
| 2 | 1600 | 1290 | 1800 | 840 | 5000 | 2870 | 1800 | 2940 | 734 | 529 | 1180 | 1150 |
| 3 | 1690 | 1310 | 2870 | 880 | 3500 | 2480 | 2270 | 2460 | 747 | 620 | 852 | 1150 |
| 4 | 1550 | 1310 | 2700 | 880 | 2700 | 2070 | 1800 | 2080 | 843 | 942 | 886 | 1150 |
| 5 | 1550 | 1310 | 2100 | 900 | 2100 | 1980 | 1660 | 1760 | 836 | 976 | 972 | 1160 |
| 6 | 1360 | 1290 | 1900 | 880 | 1700 | 1710 | 1980 | 1550 | 715 | 831 | 976 | 1230 |
| 7 | 1530 | 1380 | 1800 | 840 | 1400 | 1530 | 1890 | 1380 | 626 | 711 | 952 | 1280 |
| 8 | 1550 | 1430 | 1700 | 860 | 1300 | 1400 | 1580 | 1220 | 567 | 586 | 1100 | 760 |
| 9 | 1530 | 1310 | 1800 | 860 | 1200 | 1310 | 1450 | 1080 | 562 | 599 | 974 | 895 |
| 10 | 1500 | 1450 | 1980 | 900 | 1100 | 1240 | 1600 | 992 | 583 | 609 | 757 | 754 |
| 11 | 1400 | 1530 | 1710 | 900 | 14000 | 1180 | 1550 | 1620 | 575 | 935 | 867 | 555 |
| 12 | 1400 | 1430 | 1290 | 840 | 31400 | 1120 | 1430 | 14600 | 524 | 892 | 867 | 962 |
| 13 | 1380 | 1360 | 1200 | 840 | 10400 | 1060 | 1400 | 12600 | 755 | 591 | 917 | 1050 |
| 14 | 1310 | 1310 | 1000 | 900 | 6710 | 1030 | 1690 | 6760 | 1060 | 544 | 944 | 636 |
| 15 | 1310 | 1270 | 880 | 840 | 5170 | 928 | 2370 | 5290 | 1090 | 712 | 1100 | 558 |
| 16 | 1290 | 1240 | 800 | 860 | 3830 | 928 | 2070 | 9320 | 1050 | 782 | 1120 | 454 |
| 17 | 1400 | 1120 | 760 | 900 | 3770 | 851 | 1860 | 6970 | 814 | 843 | 994 | 433 |
| 18 | 1290 | 1220 | 740 | 960 | 5140 | 766 | 2010 | 5050 | 657 | 1100 | 969 | 820 |
| 19 | 1270 | 1060 | 700 | 1000 | 7230 | 780 | 1710 | 3940 | 605 | 941 | 974 | 1320 |
| 20 | 1330 | 944 | 700 | 980 | 17300 | 794 | 1480 | 3130 | 776 | 722 | 997 | 1240 |
| 21 | 1400 | 928 | 900 | 900 | 23400 | 700 | 1310 | 2540 | 784 | 1060 | 989 | 641 |
| 22 | 1400 | 1060 | 1000 | 840 | 11600 | 739 | 1200 | 2140 | 971 | 791 | 1180 | 611 |
| 23 | 1360 | 1040 | 1100 | 840 | 8000 | 700 | 1200 | 1750 | 1220 | 553 | 1120 | 691 |
| 24 | 1270 | 1270 | 1100 | 860 | 10000 | 656 | 2010 | 1460 | 994 | 607 | 1040 | 708 |
| 25 | 928 | 5140 | 1100 | 860 | 7720 | 645 | 2250 | 1270 | 836 | 1070 | 1040 | 693 |
| 26 | 1550 | 4150 | 1100 | 840 | 5940 | 624 | 2010 | 1120 | 792 | 1150 | 1080 | 1370 |
| 27 | 1800 | 2750 | 1000 | 800 | 4750 | 603 | 1740 | 1020 | 925 | 787 | 1060 | 1240 |
| 28 | 1010 | 2300 | 960 | 800 | 3870 | 593 | 1600 | 936 | 949 | 750 | 1080 | 635 |
| 29 | 794 | 2420 | 900 | 780 | --- | 583 | 2390 | 888 | 682 | 721 | 1140 | 518 |
| 30 | 897 | 2300 | 840 | 760 | --- | 574 | 4400 | 859 | 551 | 791 | 1130 | 497 |
| 31 | 1160 | --- | 760 | 740 | --- | 667 | --- | 836 | --- | 828 | 1020 | --- |
| TOTAL | 42409 | 49142 | 41080 | 26680 | 200970 | 36491 | 54561 | 103281 | 23613 | 24090 | 31497 | 26321 |
| MEAN | 1368 | 1638 | 1325 | 861 | 7178 | 1177 | 1819 | 3332 | 787 | 777 | 1016 | 877 |
| MAX | 1800 | 5140 | 2870 | 1000 | 31400 | 3380 | 4400 | 14600 | 1220 | 1150 | 1220 | 1370 |
| MIN | 794 | 928 | 700 | 740 | 740 | 574 | 851 | 836 | 524 | 517 | 757 | 433 |

CAL YR 1980 TOTAL 704099 MEAN 1924 MAX 33100 MIN 440
WTR YR 1981 TOTAL 660135 MEAN 1809 MAX 31400 MIN 433

## 01427510 DELAWARE RIVER AT CALLICOON, NY--Continued

## WATER-QUALITY RECORDS

**PERIOD OF DAILY RECORD.**--
WATER TEMPERATURES: June 1975 to current year.

**INSTRUMENTATION.**--Temperature recorder since June 1975.

**EXTREMES FOR PERIOD OF DAILY RECORD.**--
WATER TEMPERATURES: Maximum (water years 1976-81), 29.5°C Aug. 7-9, 1980; minimum freezing point on many days during winter periods.

**EXTREMES FOR CURRENT YEAR.**--
WATER TEMPERATURES: Maximum recorded, 28.5°C July 9-11; minimum, freezing point on many days during winter period.

### TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
| 1 | 18.0 | 15.5 | 16.5 | 6.5 | 5.5 | 6.0 | 4.5 | 3.5 | 4.0 | .0 | .0 | .0 |
| 2 | 17.0 | 16.0 | 16.5 | 6.5 | 6.0 | 6.0 | 5.5 | 4.5 | 5.0 | .0 | .0 | .0 |
| 3 | 16.0 | 15.5 | 15.5 | 6.5 | 5.0 | 6.0 | 5.5 | 2.5 | 4.0 | .0 | .0 | .0 |
| 4 | 16.0 | 14.5 | 15.0 | 7.0 | 6.0 | 6.5 | --- | --- | --- | .0 | .0 | .0 |
| 5 | 15.5 | 13.5 | 14.5 | 7.0 | 6.5 | 7.0 | --- | --- | --- | .0 | .0 | .0 |
| 6 | 15.0 | 12.5 | 13.5 | 6.5 | 5.5 | 6.0 | --- | --- | --- | .0 | .0 | .0 |
| 7 | 15.0 | 13.0 | 14.0 | 8.0 | 6.5 | 7.0 | --- | --- | --- | .0 | .0 | .0 |
| 8 | 15.5 | 13.0 | 14.5 | 8.5 | 8.0 | 8.0 | --- | --- | --- | .0 | .0 | .0 |
| 9 | 15.5 | 13.5 | 14.5 | 8.0 | 7.0 | 7.0 | --- | --- | --- | .0 | .0 | .0 |
| 10 | 14.5 | 13.0 | 13.5 | 7.0 | 5.5 | 6.5 | --- | --- | --- | .0 | .0 | .0 |
| 11 | 14.5 | 13.5 | 14.0 | 5.5 | 4.0 | 4.5 | --- | --- | --- | .0 | .0 | .0 |
| 12 | 14.0 | 12.5 | 13.0 | 4.0 | 3.0 | 3.5 | --- | --- | --- | .0 | .0 | .0 |
| 13 | 13.0 | 11.0 | 12.0 | 4.0 | 3.0 | 3.5 | --- | --- | --- | .0 | .0 | .0 |
| 14 | 11.5 | 10.0 | 10.5 | 5.5 | 4.0 | 4.5 | --- | --- | --- | .0 | .0 | .0 |
| 15 | 11.0 | 10.0 | 10.5 | 5.5 | 5.5 | 5.5 | --- | --- | --- | .0 | .0 | .0 |
| 16 | 12.0 | 10.0 | 11.0 | 5.5 | 4.0 | 5.0 | --- | --- | --- | .0 | .0 | .0 |
| 17 | 14.5 | 11.0 | 12.5 | 4.0 | 2.5 | 3.0 | --- | --- | --- | .0 | .0 | .0 |
| 18 | 14.5 | 13.5 | 14.0 | 2.5 | 2.5 | 2.5 | --- | --- | --- | .0 | .0 | .0 |
| 19 | 15.0 | 13.5 | 14.5 | 2.5 | 2.5 | 2.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 20 | 13.5 | 11.5 | 12.5 | 2.5 | 2.5 | 2.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 21 | 11.5 | 10.5 | 11.0 | 2.5 | 2.5 | 2.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 22 | 10.5 | 9.5 | 10.0 | 3.0 | 2.5 | 3.0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 23 | 9.5 | 8.5 | 9.0 | 3.0 | 2.5 | 3.0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 24 | 9.0 | 7.5 | 8.0 | 3.0 | 3.0 | 3.0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 25 | 9.0 | 8.5 | 8.5 | 4.0 | 3.0 | 3.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 26 | 9.0 | 8.0 | 8.5 | 4.0 | 3.0 | 3.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 27 | 8.5 | 7.5 | 8.0 | 3.0 | 3.0 | 3.0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 28 | 8.0 | 7.0 | 7.5 | 3.0 | 3.0 | 3.0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 29 | 7.0 | 6.5 | 6.5 | 3.5 | 3.0 | 3.0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 30 | 6.5 | 6.0 | 6.0 | 4.0 | 3.5 | 3.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 31 | 7.0 | 5.0 | 6.0 | --- | --- | --- | .0 | .0 | .0 | .0 | .0 | .0 |
| MONTH | 18.0 | 5.0 | 11.5 | 8.5 | 2.5 | 4.5 | 5.5 | .0 | 1.0 | .0 | .0 | .0 |

## 01427510 DELAWARE RIVER AT CALLICOON, NY--Continued

### TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | .0 | .0 | .0 | 4.0 | 3.5 | 3.5 | 11.5 | 9.0 | 10.5 | 12.0 | 9.5 | 10.5 |
| 2 | .0 | .0 | .0 | 3.5 | 3.5 | 3.5 | 12.0 | 9.0 | 10.0 | 12.0 | 10.0 | 10.5 |
| 3 | .0 | .0 | .0 | 3.5 | 2.5 | 3.0 | 12.5 | 10.5 | 11.0 | 13.5 | 9.0 | 11.0 |
| 4 | .0 | .0 | .0 | 2.5 | 1.5 | 2.0 | 12.5 | 11.5 | 12.0 | 15.5 | 10.0 | 12.5 |
| 5 | .0 | .0 | .0 | 2.0 | 2.0 | 2.0 | 12.0 | 9.5 | 10.5 | 16.5 | 12.0 | 14.5 |
| 6 | .0 | .0 | .0 | 3.0 | 1.5 | 2.0 | 9.5 | 6.5 | 8.0 | 15.0 | 12.5 | 14.5 |
| 7 | .0 | .0 | .0 | 3.0 | 2.0 | 2.5 | 10.5 | 7.5 | 9.0 | 14.5 | 10.0 | 12.5 |
| 8 | .0 | .0 | .0 | 3.0 | 2.0 | 2.5 | 12.5 | 10.0 | 11.0 | 15.5 | 9.5 | 12.5 |
| 9 | .0 | .0 | .0 | 4.5 | 3.0 | 3.5 | 11.0 | 8.5 | 10.0 | 16.0 | 10.5 | 13.5 |
| 10 | .0 | .0 | .0 | 4.5 | 3.5 | 4.0 | 13.5 | 9.5 | 11.0 | 17.5 | 12.0 | 15.0 |
| 11 | .0 | .0 | .0 | 5.5 | 3.5 | 4.5 | 11.5 | 10.5 | 11.0 | 16.5 | 14.0 | 15.0 |
| 12 | .0 | .0 | .0 | 5.5 | 3.5 | 4.5 | 14.0 | 10.5 | 11.5 | 14.0 | 11.0 | 12.5 |
| 13 | .0 | .0 | .0 | 6.5 | 4.0 | 5.5 | 13.5 | 9.5 | 11.5 | 11.0 | 10.0 | 10.5 |
| 14 | .0 | .0 | .0 | 5.5 | 3.0 | 3.5 | 9.5 | 6.5 | 8.0 | 13.0 | 10.0 | 11.5 |
| 15 | 1.0 | .0 | .5 | 6.0 | 2.0 | 4.0 | 9.0 | 6.0 | 7.5 | 14.5 | 12.5 | 13.5 |
| 16 | 2.0 | 1.0 | 1.0 | 5.5 | 2.0 | 4.0 | 10.5 | 6.0 | 8.5 | 13.5 | 12.0 | 13.0 |
| 17 | 3.0 | 2.0 | 2.5 | 2.5 | 1.5 | 2.0 | 8.5 | 7.5 | 8.5 | 12.5 | 10.5 | 11.5 |
| 18 | 4.0 | 3.0 | 3.0 | 1.5 | 1.5 | 1.5 | 13.0 | 8.5 | 11.0 | 12.5 | 10.5 | 11.5 |
| 19 | 4.0 | 3.0 | 3.5 | 1.5 | 1.5 | 1.5 | 13.0 | 9.0 | 11.0 | 12.5 | 10.5 | 11.0 |
| 20 | 4.0 | 4.0 | 4.0 | 1.5 | 1.5 | 1.5 | 11.0 | 6.5 | 9.5 | 14.5 | 10.0 | 11.5 |
| 21 | 4.5 | 2.0 | 3.5 | 2.5 | 1.5 | 1.5 | 10.0 | 6.0 | 8.0 | 16.0 | 11.5 | 13.0 |
| 22 | 5.5 | 4.5 | 5.0 | 5.5 | 1.5 | 3.5 | 11.0 | 6.0 | 8.5 | 17.5 | 13.0 | 14.5 |
| 23 | 6.0 | 5.5 | 6.0 | 6.0 | 3.5 | 5.0 | 8.0 | 8.0 | 8.0 | 18.5 | 14.0 | 16.0 |
| 24 | 6.0 | 6.0 | 6.0 | 6.5 | 4.5 | 5.5 | 9.5 | 8.0 | 8.5 | 19.0 | 14>5D | 17.0 |
| 25 | 6.5 | 5.5 | 6.0 | 8.5 | 4.0 | 6.5 | 8.0 | 7.0 | 7.5 | 20.0 | 16.0 | 18.0 |
| 26 | 5.5 | 4.5 | 4.5 | 8.5 | 7.0 | 7.5 | 10.0 | 6.5 | 8.0 | 22.0 | 18.0 | 20.0 |
| 27 | 4.5 | 3.5 | 4.0 | 9.5 | 5.0 | 7.0 | 12.0 | 8.0 | 10.0 | 23.0 | 19.0 | 21.0 |
| 28 | 4.5 | 4.0 | 4.0 | 11.5 | 6.5 | 8.5 | 13.0 | 9.5 | 11.0 | 23.5 | 19.5 | 21.5 |
| 29 | --- | --- | --- | 11.5 | 9.5 | 10.5 | 12.5 | 11.0 | 11.5 | 21.5 | 19.0 | 20.0 |
| 30 | --- | --- | --- | 11.0 | 9.5 | 10.0 | 11.5 | 10.5 | 11.0 | 21.0 | 19.5 | 20.0 |
| 31 | --- | --- | --- | 11.5 | 9.0 | 10.0 | --- | --- | --- | 23.5 | 20.5 | 22.0 |
| MONTH | 6.5 | .0 | 2.0 | 11.5 | 1.5 | 4.5 | 14.0 | 6.0 | 10.0 | 23.5 | 9.0 | 14.5 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 22.0 | 17.0 | 20.0 | 23.5 | 22.0 | 22.5 | --- | --- | --- | 20.5 | 18.0 | 19.0 |
| 2 | 22.5 | 18.0 | 20.5 | 23.5 | 21.5 | 23.0 | --- | --- | --- | 19.0 | 18.0 | 19.0 |
| 3 | --- | --- | --- | 25.5 | 22.0 | 24.0 | --- | --- | --- | 19.5 | 18.0 | 18.5 |
| 4 | --- | --- | --- | 25.0 | 22.5 | 23.0 | --- | --- | --- | 18.5 | 17.0 | 17.5 |
| 5 | --- | --- | --- | 23.5 | 21.0 | 22.0 | --- | --- | --- | 18.5 | 16.5 | 17.5 |
| 6 | --- | --- | --- | 25.0 | 20.0 | 22.0 | --- | --- | --- | 18.0 | 16.5 | 17.0 |
| 7 | --- | --- | --- | 26.5 | 21.5 | 24.0 | --- | --- | --- | 19.0 | 16.5 | 17.5 |
| 8 | --- | --- | --- | 27.5 | 23.5 | 25.5 | --- | --- | --- | 18.5 | 17.5 | 18.0 |
| 9 | --- | --- | --- | 28.5 | 25.0 | 26.5 | --- | --- | --- | 19.0 | 16.5 | 18.0 |
| 10 | 21.5 | 19.0 | 20.5 | 28.5 | 26.0 | 27.5 | --- | --- | --- | 19.5 | 15.5 | 17.5 |
| 11 | 22.5 | 18.0 | 20.5 | 28.5 | 23.5 | 26.0 | --- | --- | --- | 21.5 | 17.5 | 19.5 |
| 12 | 23.0 | 19.0 | 21.5 | 28.0 | 23.0 | 25.0 | --- | --- | --- | 22.5 | 19.0 | 21.0 |
| 13 | 25.5 | 20.0 | 23.0 | 26.0 | 22.5 | 24.5 | --- | --- | --- | 22.0 | 18.5 | 20.5 |
| 14 | 22.5 | 18.0 | 20.0 | 26.0 | 22.5 | 24.0 | 23.5 | 20.5 | 22.0 | 22.5 | 18.5 | 20.5 |
| 15 | 22.5 | 17.5 | 20.0 | 25.0 | 20.5 | 23.0 | 22.0 | 20.5 | 21.5 | 22.0 | 20.0 | 20.5 |
| 16 | 26.5 | 20.0 | 24.0 | 24.5 | 20.0 | 22.5 | 21.5 | 19.0 | 20.5 | 20.0 | 18.5 | 19.5 |
| 17 | 24.5 | 20.5 | 23.0 | 25.0 | 20.0 | 22.5 | 20.0 | 16.5 | 18.5 | 19.5 | 18.0 | 18.5 |
| 18 | 25.5 | 20.0 | 23.5 | 23.5 | 20.0 | 22.0 | 21.5 | 16.0 | 19.0 | 19.5 | 17.5 | 18.5 |
| 19 | 25.5 | 21.5 | 24.0 | 22.5 | 19.5 | 21.0 | 22.0 | 16.5 | 19.5 | 18.0 | 16.5 | 17.0 |
| 20 | 23.0 | 21.0 | 22.5 | 21.5 | 20.0 | 20.5 | 22.0 | 17.5 | 20.0 | 16.5 | 15.0 | 16.0 |
| 21 | 23.0 | 20.5 | 22.0 | 22.5 | 20.0 | 21.5 | 22.0 | 17.5 | 20.0 | 16.5 | 14.0 | 15.5 |
| 22 | 22.5 | 18.5 | 20.5 | 23.5 | 20.0 | 22.0 | 20.5 | 18.5 | 19.0 | 16.5 | 15.0 | 16.0 |
| 23 | 21.0 | 17.5 | 19.5 | 24.0 | 19.5 | 22.0 | 21.0 | 16.5 | 19.0 | 15.0 | 12.5 | 13.5 |
| 24 | 23.0 | 17.5 | 21.0 | 24.0 | 20.5 | 22.5 | 19.5 | 17.0 | 18.5 | 12.5 | 11.5 | 12.0 |
| 25 | 22.0 | 18.5 | 20.5 | 24.0 | 21.0 | 22.5 | 21.0 | 17.0 | 19.0 | 15.0 | 10.5 | 13.0 |
| 26 | 18.5 | 15.5 | 17.0 | --- | --- | --- | 22.0 | 17.0 | 19.5 | 15.0 | 13.0 | 14.0 |
| 27 | 21.0 | 15.0 | 18.5 | --- | --- | --- | 21.0 | 17.5 | 19.5 | 17.5 | 13.5 | 15.5 |
| 28 | 23.0 | 16.5 | 20.0 | --- | --- | --- | 20.5 | 18.5 | 19.5 | 17.0 | 13.5 | 15.5 |
| 29 | 23.5 | 18.0 | 21.0 | --- | --- | --- | 19.0 | 17.5 | 18.0 | 13.5 | 11.5 | 12.5 |
| 30 | 24.5 | 20.5 | 23.0 | --- | --- | --- | 19.0 | 17.0 | 18.0 | 13.0 | 11.0 | 12.0 |
| 31 | --- | --- | --- | --- | --- | --- | 19.0 | 18.0 | 18.5 | --- | --- | --- |
| MONTH | 26.5 | 15.0 | 21.0 | 28.5 | 19.5 | 23.5 | 23.5 | 16.0 | 19.5 | 22.5 | 10.5 | 17.0 |

## 01428500 DELAWARE RIVER ABOVE LACKAWAXEN RIVER NEAR BARRYVILLE, NY

LOCATION.--Lat 41°30'31", long 74°59'11", Sullivan County, Hydrologic Unit 02040101, on left bank 1.6 mi (2.6 km) upstream from Lackawaxen River, and 4.6 mi (7.4 km) northwest of Barryville. Water-quality sampling site at discharge station.

DRAINAGE AREA.--2,023 $mi^2$ (5,240 $km^2$).

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 600.22 ft (182.947 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records excellent except those for winter periods, which are poor. Subsequent to September 1954, entire flow from 371 $mi^2$ (961 $km^2$) of drainage area controlled by Pepacton Reservoir (see Reservoirs in Delaware River Basin), and subsequent to October 1963, entire flow from 454 $mi^2$ (1,176 $km^2$) of drainage area controlled by Cannonsville Reservoir (see Reservoirs in Delaware River Basin). Part of flow of these reservoirs diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 130,000 $ft^3/s$ (3,680 $m^3/s$) Aug. 19, 1955, gage height, 26.40 ft (8.047 m) from floodmarks in gage house, from rating curve extended above 55,000 $ft^3/s$ (1,560 $m^3/s$) on basis of slope-area measurement at gage height 23.19 ft (7.068 m); minimum, 122 $ft^3/s$ (3.46 $m^3/s$) Sept. 5, 1953, gage height, 1.11 ft (0.338 m); minimum daily, 126 $ft^3/s$ (3.57 $m^3/s$) Sept. 4, 1953.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 52,800 $ft^3/s$ (1,495 $m^3/s$) Feb. 12, result of ice jam release, gage height, 15.25 ft (4.648 m); maximum gage height, 20.90 ft (6.370 m) Feb. 11 (ice jam); minimum discharge, 337 $ft^3/s$ (9.54 $m^3/s$) Sept. 18, 19, gage height, 1.85 ft (0.564 m); minimum daily, 362 $ft^3/s$ (10.25 $m^3/s$) Sept. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1260 | 1230 | 2020 | 860 | 780 | 3700 | 950 | 4200 | 1000 | 566 | 1090 | 1130 |
| 2 | 1600 | 1310 | 1820 | 880 | 6000 | 3230 | 1790 | 3360 | 991 | 594 | 1280 | 1200 |
| 3 | 1610 | 1330 | 2460 | 920 | 4500 | 2810 | 2560 | 2850 | 940 | 626 | 1100 | 1200 |
| 4 | 1610 | 1360 | 3030 | 980 | 3400 | 2370 | 2120 | 2470 | 1070 | 673 | 830 | 1200 |
| 5 | 1530 | 1340 | 2200 | 1000 | 2600 | 2210 | 1930 | 2140 | 1060 | 1170 | 975 | 1210 |
| 6 | 1440 | 1350 | 1870 | 980 | 2000 | 2040 | 2100 | 1920 | 942 | 1090 | 1040 | 1200 |
| 7 | 1460 | 1370 | 2070 | 940 | 1700 | 1850 | 2210 | 1750 | 801 | 830 | 1030 | 1350 |
| 8 | 1540 | 1470 | 1940 | 960 | 1500 | 1700 | 1900 | 1590 | 707 | 686 | 1110 | 1060 |
| 9 | 1550 | 1400 | 1890 | 980 | 1300 | 1600 | 1770 | 1420 | 665 | 581 | 1140 | 880 |
| 10 | 1520 | 1440 | 2060 | 1000 | 1200 | 1510 | 1850 | 1280 | 678 | 622 | 902 | 938 |
| 11 | 1520 | 1530 | 1950 | 1000 | 15000 | 1450 | 1930 | 1430 | 689 | 783 | 749 | 682 |
| 12 | 1390 | 1460 | 1570 | 1000 | 33800 | 1380 | 1740 | 14300 | 621 | 1060 | 995 | 679 |
| 13 | 1400 | 1400 | 1410 | 960 | 12500 | 1310 | 1750 | 16900 | 620 | 821 | 920 | 1120 |
| 14 | 1360 | 1380 | 1250 | 980 | 7540 | 1290 | 1840 | 8640 | 1210 | 611 | 1000 | 906 |
| 15 | 1350 | 1300 | 966 | 1000 | 5530 | 1200 | 2820 | 6070 | 1370 | 541 | 1060 | 605 |
| 16 | 1340 | 1290 | 748 | 1000 | 4280 | 1140 | 2610 | 11900 | 1260 | 944 | 1170 | 495 |
| 17 | 1330 | 1250 | 720 | 1000 | 5200 | 1110 | 2240 | 9310 | 1070 | 853 | 1110 | 405 |
| 18 | 1460 | 1300 | 800 | 1100 | 6000 | 915 | 2280 | 6260 | 816 | 1130 | 1050 | 362 |
| 19 | 1200 | 1250 | 760 | 1200 | 8000 | 861 | 2140 | 4740 | 703 | 1130 | 1060 | 1210 |
| 20 | 1290 | 983 | 900 | 1200 | 15400 | 944 | 1900 | 3830 | 773 | 954 | 999 | 1370 |
| 21 | 1410 | 1050 | 1000 | 1100 | 27900 | 834 | 1740 | 3150 | 872 | 1040 | 1110 | 967 |
| 22 | 1430 | 1020 | 1100 | 1000 | 14300 | 897 | 1600 | 2640 | 975 | 950 | 1110 | 603 |
| 23 | 1390 | 1210 | 1200 | 940 | 9670 | 915 | 1540 | 2240 | 1320 | 735 | 1260 | 686 |
| 24 | 1380 | 972 | 1200 | 980 | 11800 | 848 | 2110 | 1920 | 1210 | 515 | 1150 | 775 |
| 25 | 1280 | 4490 | 1200 | 1000 | 9640 | 808 | 2610 | 1690 | 982 | 928 | 1130 | 655 |
| 26 | 1210 | 4670 | 1200 | 940 | 6900 | 777 | 2370 | 1530 | 894 | 1230 | 1140 | 1110 |
| 27 | 2080 | 3070 | 1200 | 900 | 5340 | 753 | 2110 | 1360 | 922 | 987 | 1170 | 1400 |
| 28 | 1310 | 2410 | 1100 | 880 | 4260 | 730 | 1920 | 1260 | 1090 | 741 | 1130 | 983 |
| 29 | 942 | 2410 | 1000 | 860 | --- | 715 | 2340 | 1170 | 926 | 794 | 1210 | 526 |
| 30 | 787 | 2430 | 960 | 840 | --- | 700 | 4230 | 1100 | 657 | 758 | 1220 | 505 |
| 31 | 1190 | --- | 880 | 800 | --- | 763 | --- | 1060 | --- | 879 | 1170 | --- |
| TOTAL | 43169 | 50475 | 44474 | 30180 | 228040 | 43360 | 63000 | 125480 | 27834 | 25822 | 33410 | 27412 |
| MEAN | 1393 | 1683 | 1435 | 974 | 8144 | 1399 | 2100 | 4048 | 928 | 833 | 1078 | 914 |
| MAX | 2080 | 4670 | 3030 | 1200 | 33800 | 3700 | 4230 | 16900 | 1370 | 1230 | 1280 | 1400 |
| MIN | 787 | 972 | 720 | 800 | 780 | 700 | 950 | 1060 | 620 | 515 | 749 | 362 |

CAL YR 1980 TOTAL 798378 MEAN 2181 MAX 38600 MIN 540
WTR YR 1981 TOTAL 742656 MEAN 2035 MAX 33800 MIN 362

## 01428500 DELAWARE RIVER ABOVE LACKAWAXEN RIVER NEAR BARRYVILLE, NY--Continued

### WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968 to current year.
CHEMICAL DATA: 1971-73 (a).
NUTRIENT DATA: 1971 (a).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1967 to current year (no winter record for water years 1969-76).

INSTRUMENTATION.--Temperature recorder since October 1967.

REMARKS.--No record July 21 to Aug. 13, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1968-75, 1980-81), 32.0°C Aug. 2, 3 1975, July 10, 1981; minimum (water years 1968, 1977-81), freezing point on many days during winter periods, each year except water years 1980 and 1981.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 32.0°C July 10; minimum 0.5°C on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 18.5 | 15.5 | 17.0 | 6.0 | 5.0 | 5.5 | 4.0 | 3.0 | 3.5 | .5 | .5 | .5 |
| 2 | 17.0 | 16.0 | 16.5 | 6.0 | 5.0 | 5.5 | 5.5 | 3.5 | 4.5 | .5 | .5 | .5 |
| 3 | 16.5 | 15.5 | 16.0 | 7.0 | 4.0 | 5.5 | 5.0 | 2.0 | 3.5 | .5 | .5 | .5 |
| 4 | 16.5 | 14.5 | 15.5 | 6.5 | 5.5 | 6.0 | 2.0 | .5 | 1.0 | .5 | .5 | .5 |
| 5 | 16.5 | 13.5 | 15.0 | 7.0 | 5.5 | 6.5 | .5 | .5 | .5 | .5 | .5 | .5 |
| 6 | 16.5 | 13.0 | 14.5 | 7.0 | 5.0 | 6.0 | 1.0 | .5 | .5 | .5 | .5 | .5 |
| 7 | 15.0 | 12.5 | 14.0 | 8.5 | 5.5 | 7.0 | 1.0 | .5 | .5 | .5 | .5 | .5 |
| 8 | 16.0 | 12.5 | 14.0 | 9.0 | 7.0 | 8.0 | 2.0 | 1.0 | 1.5 | .5 | .5 | .5 |
| 9 | 16.5 | 13.5 | 14.5 | 7.0 | 6.5 | 6.5 | 2.0 | 1.0 | 1.5 | .5 | .5 | .5 |
| 10 | 15.0 | 12.5 | 13.5 | 6.5 | 5.0 | 6.0 | 1.5 | 1.0 | 1.0 | .5 | .5 | .5 |
| 11 | 15.0 | 13.5 | 14.0 | 5.0 | 3.5 | 4.5 | 1.0 | .5 | .5 | .5 | .5 | .5 |
| 12 | 13.5 | 12.5 | 13.0 | 4.0 | 2.5 | 3.0 | .5 | .5 | .5 | .5 | .5 | .5 |
| 13 | 13.0 | 11.0 | 12.0 | 4.5 | 2.0 | 3.5 | 1.0 | .5 | .5 | .5 | .5 | .5 |
| 14 | 13.0 | 10.0 | 11.0 | 5.5 | 3.0 | 4.0 | .5 | .5 | .5 | .5 | .5 | .5 |
| 15 | 12.0 | 10.0 | 11.0 | 5.5 | 4.0 | 4.5 | .5 | .5 | .5 | .5 | .5 | .5 |
| 16 | 12.5 | 10.0 | 11.5 | 6.0 | 4.0 | 4.5 | .5 | .5 | .5 | .5 | .5 | .5 |
| 17 | 14.5 | 11.0 | 12.5 | 4.0 | 1.0 | 3.0 | .5 | .5 | .5 | .5 | .5 | .5 |
| 18 | 15.0 | 13.0 | 14.0 | 2.0 | .5 | 1.0 | .5 | .5 | .5 | .5 | .5 | .5 |
| 19 | 16.5 | 13.5 | 14.5 | 2.0 | .5 | 1.0 | .5 | .5 | .5 | .5 | .5 | .5 |
| 20 | 14.5 | 13.0 | 13.5 | 3.0 | .5 | 1.5 | .5 | .5 | .5 | .5 | .5 | .5 |
| 21 | 13.0 | 11.5 | 12.0 | 2.5 | .5 | 1.5 | .5 | .5 | .5 | .5 | .5 | .5 |
| 22 | 11.5 | 9.5 | 10.5 | 3.5 | 1.5 | 2.5 | .5 | .5 | .5 | .5 | .5 | .5 |
| 23 | 11.0 | 8.0 | 9.5 | 3.0 | 1.0 | 2.0 | .5 | .5 | .5 | .5 | .5 | .5 |
| 24 | 10.0 | 7.0 | 8.5 | 3.0 | 2.5 | 2.5 | .5 | .5 | .5 | .5 | .5 | .5 |
| 25 | 9.0 | 8.0 | 8.5 | 3.5 | 3.0 | 3.5 | .5 | .5 | .5 | .5 | .5 | .5 |
| 26 | 9.0 | 7.5 | 8.0 | 3.5 | 3.0 | 3.5 | .5 | .5 | .5 | .5 | .5 | .5 |
| 27 | 9.0 | 7.0 | 8.0 | 3.0 | 2.5 | 2.5 | .5 | .5 | .5 | .5 | .5 | .5 |
| 28 | 8.5 | 7.5 | 8.0 | 3.0 | 2.5 | 2.5 | .5 | .5 | .5 | .5 | .5 | .5 |
| 29 | 7.5 | 6.5 | 7.0 | 3.5 | 2.5 | 2.5 | .5 | .5 | .5 | .5 | .5 | .5 |
| 30 | 6.5 | 5.5 | 6.5 | 3.5 | 2.5 | 3.0 | .5 | .5 | .5 | .5 | .5 | .5 |
| 31 | 8.0 | 4.5 | 6.0 | --- | --- | --- | .5 | .5 | .5 | .5 | .5 | .5 |
| MONTH | 18.5 | 4.5 | 12.0 | 9.0 | .5 | 4.0 | 5.5 | .5 | 1.0 | .5 | .5 | .5 |

## 01428500 DELAWARE RIVER ABOVE LACKAWAXEN RIVER NEAR BARRYVILLE, NY--Continued

### TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | .5 | .5 | .5 | 4.5 | 4.5 | 4.5 | 14.0 | 10.5 | 12.0 | 13.0 | 12.0 | 12.5 |
| 2 | .5 | .5 | .5 | 4.5 | 4.0 | 4.0 | 14.0 | 11.5 | 12.5 | 13.5 | 12.5 | 13.0 |
| 3 | .5 | .5 | .5 | 4.0 | 2.5 | 3.5 | 14.0 | 11.0 | 12.5 | 15.0 | 12.0 | 13.5 |
| 4 | .5 | .5 | .5 | 4.0 | 2.0 | 3.0 | 14.5 | 12.5 | 13.5 | 17.0 | 12.5 | 14.5 |
| 5 | .5 | .5 | .5 | 3.0 | 2.0 | 2.5 | 14.0 | 13.0 | 13.5 | 19.0 | 14.5 | 16.5 |
| 6 | .5 | .5 | .5 | 4.0 | 1.5 | 3.0 | 13.0 | 10.5 | 12.0 | 17.5 | 15.0 | 16.5 |
| 7 | .5 | .5 | .5 | 4.0 | 2.0 | 3.0 | 12.5 | 9.5 | 11.0 | 17.0 | 13.0 | 15.0 |
| 8 | .5 | .5 | .5 | 4.0 | 2.5 | 3.5 | 14.5 | 10.0 | 12.0 | 17.5 | 12.5 | 15.0 |
| 9 | .5 | .5 | .5 | 5.5 | 3.5 | 4.5 | 13.5 | 12.0 | 12.5 | 18.0 | 13.0 | 15.5 |
| 10 | .5 | .5 | .5 | 6.0 | 4.0 | 5.0 | 15.0 | 10.5 | 12.5 | 18.5 | 14.0 | 16.5 |
| 11 | .5 | .5 | .5 | 6.0 | 4.0 | 5.0 | 14.0 | 12.0 | 13.0 | 17.5 | 16.5 | 17.0 |
| 12 | .5 | .5 | .5 | 7.0 | 4.0 | 5.5 | 14.0 | 12.5 | 13.0 | 16.5 | 13.5 | 15.0 |
| 13 | 1.0 | .5 | .5 | 8.0 | 4.5 | 6.0 | 15.5 | 12.0 | 13.5 | 13.5 | 12.0 | 13.0 |
| 14 | 1.0 | .5 | 1.0 | 5.5 | 3.5 | 4.5 | 13.0 | 11.0 | 12.0 | 14.0 | 12.0 | 13.0 |
| 15 | 1.5 | .5 | 1.0 | 8.0 | 2.5 | 5.0 | 11.0 | 9.0 | 10.0 | 16.0 | 14.0 | 15.0 |
| 16 | 2.5 | .5 | 1.5 | 5.5 | 3.0 | 5.0 | 12.0 | 8.5 | 10.0 | 15.5 | 14.0 | 14.5 |
| 17 | 4.0 | 2.5 | 3.0 | 5.5 | 1.5 | 3.0 | 11.0 | 9.5 | 10.5 | 14.0 | 12.5 | 13.5 |
| 18 | 5.0 | 3.5 | 4.0 | 4.0 | 1.5 | 2.5 | 14.0 | 10.0 | 11.5 | 14.0 | 12.5 | 13.5 |
| 19 | 4.5 | 4.0 | 4.5 | 4.0 | 2.0 | 3.0 | 14.0 | 11.5 | 12.5 | 13.5 | 12.5 | 13.0 |
| 20 | 5.0 | 4.5 | 5.0 | 3.5 | 2.0 | 2.5 | 13.5 | 11.0 | 12.0 | 15.0 | 12.5 | 13.5 |
| 21 | 5.0 | 3.5 | 4.0 | 3.5 | 2.0 | 2.5 | 12.5 | 9.0 | 10.5 | 17.0 | 13.5 | 15.0 |
| 22 | 6.5 | 5.0 | 6.0 | 7.0 | 2.0 | 4.0 | 13.5 | 8.0 | 11.0 | 18.5 | 15.0 | 17.0 |
| 23 | 7.0 | 6.5 | 6.5 | 9.0 | 3.0 | 5.5 | 11.0 | 10.0 | 10.5 | 20.0 | 16.0 | 18.0 |
| 24 | 7.0 | 6.5 | 7.0 | 9.0 | 4.5 | 6.5 | 11.5 | 9.5 | 10.5 | 21.0 | 16.5 | 19.0 |
| 25 | 7.0 | 6.0 | 6.5 | 8.5 | 5.5 | 6.5 | 10.5 | 9.0 | 10.0 | 22.5 | 18.0 | 20.0 |
| 26 | 6.0 | 4.5 | 5.0 | 11.0 | 5.0 | 7.5 | 11.5 | 8.5 | 10.0 | 23.0 | 19.5 | 21.5 |
| 27 | 5.5 | 4.5 | 5.0 | 9.5 | 7.5 | 8.5 | 14.0 | 10.0 | 11.5 | 24.5 | 20.5 | 22.5 |
| 28 | 5.0 | 4.5 | 4.5 | 12.5 | 6.5 | 9.0 | 14.0 | 11.5 | 12.5 | 23.5 | 21.0 | 22.0 |
| 29 | --- | --- | --- | 14.5 | 8.0 | 11.0 | 15.0 | 13.0 | 14.0 | 23.0 | 21.0 | 21.5 |
| 30 | --- | --- | --- | 12.0 | 10.5 | 11.5 | 14.0 | 13.0 | 13.5 | 25.0 | 20.5 | 22.5 |
| 31 | --- | --- | --- | 14.5 | 11.0 | 12.5 | --- | --- | --- | 25.5 | 21.5 | 23.0 |
| MONTH | 7.0 | .5 | 2.5 | 14.5 | 1.5 | 5.5 | 15.5 | 8.0 | 12.0 | 25.5 | 12.0 | 16.5 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 24.5 | 19.5 | 22.0 | 25.5 | 23.5 | 24.5 | --- | --- | --- | 21.5 | 19.0 | 20.0 |
| 2 | 22.0 | 19.5 | 20.5 | 26.0 | 23.5 | 24.5 | --- | --- | --- | 20.5 | 19.5 | 20.0 |
| 3 | 19.5 | 18.5 | 19.0 | 27.0 | 24.0 | 25.0 | --- | --- | --- | 21.0 | 19.5 | 20.0 |
| 4 | 22.5 | 18.0 | 20.0 | 25.0 | 23.5 | 24.5 | --- | --- | --- | 19.5 | 18.5 | 19.0 |
| 5 | 24.0 | 19.5 | 21.5 | 27.0 | 23.5 | 24.5 | --- | --- | --- | 20.0 | 18.0 | 19.0 |
| 6 | 25.5 | 20.5 | 22.5 | 28.0 | 23.5 | 25.5 | --- | --- | --- | 19.5 | 18.5 | 19.0 |
| 7 | 24.0 | 20.5 | 22.0 | 29.0 | 23.5 | 26.5 | --- | --- | --- | 19.5 | 18.0 | 19.0 |
| 8 | 25.0 | 19.0 | 22.0 | 30.5 | 25.0 | 27.5 | --- | --- | --- | 19.0 | 18.5 | 19.0 |
| 9 | 25.5 | 22.0 | 23.5 | 31.0 | 26.5 | 28.5 | --- | --- | --- | 20.5 | 17.0 | 18.5 |
| 10 | 22.5 | 21.0 | 22.0 | 32.0 | 27.5 | 29.5 | --- | --- | --- | 20.5 | 16.5 | 18.0 |
| 11 | 25.0 | 19.5 | 22.0 | 31.0 | 26.0 | 28.5 | --- | --- | --- | 22.5 | 17.5 | 20.0 |
| 12 | 25.0 | 20.5 | 22.5 | 30.5 | 26.0 | 28.0 | --- | --- | --- | 24.0 | 19.5 | 21.5 |
| 13 | 26.5 | 21.5 | 24.0 | 30.5 | 26.5 | 28.0 | --- | --- | --- | 23.5 | 19.5 | 21.5 |
| 14 | 24.0 | 21.5 | 22.5 | 28.0 | 24.0 | 26.5 | 25.5 | 22.5 | 24.0 | 24.0 | 20.0 | 22.0 |
| 15 | 24.5 | 20.5 | 22.5 | 27.0 | 23.0 | 25.0 | 24.5 | 23.0 | 24.0 | 22.0 | 20.5 | 21.0 |
| 16 | 27.5 | 22.0 | 24.5 | 27.0 | 22.5 | 25.0 | 25.0 | 22.0 | 23.5 | 20.5 | 19.5 | 20.0 |
| 17 | 26.5 | 23.5 | 25.0 | 28.0 | 23.0 | 25.5 | 23.5 | 19.5 | 21.5 | 20.0 | 18.5 | 19.0 |
| 18 | 27.5 | 22.0 | 24.5 | 27.0 | 24.0 | 25.5 | 23.0 | 18.0 | 20.5 | 21.0 | 18.0 | 19.0 |
| 19 | 26.0 | 23.0 | 24.5 | 27.0 | 23.5 | 25.5 | 23.0 | 18.5 | 21.0 | 18.5 | 17.0 | 18.0 |
| 20 | 25.0 | 23.5 | 24.0 | 25.0 | 23.5 | 24.0 | 24.0 | 19.5 | 21.5 | 18.0 | 16.5 | 17.0 |
| 21 | 26.0 | 22.5 | 24.0 | --- | --- | --- | 24.0 | 19.5 | 21.5 | 19.0 | 15.0 | 16.5 |
| 22 | 25.0 | 22.5 | 23.5 | --- | --- | --- | 22.0 | 20.5 | 21.0 | 17.5 | 16.5 | 17.0 |
| 23 | 23.5 | 21.0 | 22.0 | --- | --- | --- | 23.5 | 19.0 | 21.0 | 16.0 | 13.5 | 15.0 |
| 24 | 24.0 | 20.0 | 22.0 | --- | --- | --- | 21.5 | 19.5 | 20.5 | 13.5 | 12.5 | 13.0 |
| 25 | 24.0 | 21.5 | 22.5 | --- | --- | --- | 21.5 | 18.5 | 20.0 | 16.5 | 11.5 | 14.0 |
| 26 | 22.0 | 18.5 | 20.5 | --- | --- | --- | 23.5 | 19.0 | 21.0 | 15.0 | 14.0 | 14.5 |
| 27 | 23.5 | 17.5 | 20.5 | --- | --- | --- | 23.0 | 19.5 | 21.5 | 16.5 | 14.0 | 15.5 |
| 28 | 24.5 | 18.5 | 21.5 | --- | --- | --- | 22.0 | 20.5 | 21.0 | 17.5 | 14.5 | 16.0 |
| 29 | 25.5 | 20.5 | 23.0 | --- | --- | --- | 20.5 | 19.5 | 20.0 | 15.5 | 13.5 | 14.5 |
| 30 | 27.5 | 22.0 | 24.5 | --- | --- | --- | 21.0 | 19.0 | 20.0 | 14.0 | 12.5 | 13.5 |
| 31 | --- | --- | --- | --- | --- | --- | 20.5 | 19.5 | 20.0 | --- | --- | --- |
| MONTH | 27.5 | 17.5 | 22.5 | 32.0 | 22.5 | 26.0 | 25.5 | 18.0 | 21.5 | 24.0 | 11.5 | 18.0 |

## 01432160 DELAWARE RIVER AT BARRYVILLE, NY

**LOCATION.**--Lat 41°28'31", long 74°54'46", Pike County, Pa. Hydrologic Unit 02040104, at Shohola-Barryville Bridge at Barryville, just upstream from Halfway Brook, and 1,000 ft (305 m) upstream from Shohola Brook.

**DRAINAGE AREA.**--2,692 mi² (6,972 km²).

**PERIOD OF RECORD.**--Water years 1958, 1968 to current year.
CHEMICAL DATA: 1958 (d), 1969 (a), 1973 (b), 1974 (d), 1975 (b).
NUTRIENT DATA: 1973 (b), 1974 (d), 1975 (b).
BIOLOGICAL DATA:
Bacteria.--1973 (b), 1974 (d), 1975 (b).

**PERIOD OF DAILY RECORD.**--
WATER TEMPERATURES: October 1967 to September 1973, March 1975 to current year.

**INSTRUMENTATION.**--Temperature recorder since October 1967.

**REMARKS.**--Unpublished records of daily temperatures for May to September 1964-66 are available in files of the Geological Survey. Temperature probe may be influenced by solar radiation during periods of low flow.

**EXTREMES FOR PERIOD OF DAILY RECORD.**--
WATER TEMPERATURES: Maximum (water years 1968-73, 1976-78, 1980-81), 32.0°C July 20, 21, 1980; minimum, freezing point on many days during winter periods.

**EXTREMES FOR CURRENT YEAR.**--
WATER TEMPERATURES: Maximum, 31.5°C July 9; minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
| 1 | 18.5 | 16.0 | 17.5 | 6.0 | 4.5 | 5.0 | 3.5 | 2.5 | 3.0 | .0 | .0 | .0 |
| 2 | 17.0 | 16.5 | 17.0 | 5.5 | 4.5 | 5.0 | 4.5 | 3.5 | 4.0 | .0 | .0 | .0 |
| 3 | 16.5 | 16.0 | 16.5 | 5.5 | 4.0 | 4.5 | 4.5 | 1.0 | 2.5 | .0 | .0 | .0 |
| 4 | 16.0 | 15.0 | 15.5 | 6.0 | 5.5 | 6.0 | 1.0 | .0 | .0 | .0 | .0 | .0 |
| 5 | 15.5 | 14.0 | 14.5 | 6.5 | 5.0 | 6.0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 6 | 15.0 | 13.0 | 14.0 | 5.5 | 4.5 | 5.0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 7 | 14.5 | 13.5 | 14.0 | 7.0 | 5.5 | 6.5 | .5 | .0 | .0 | .0 | .0 | .0 |
| 8 | 14.5 | 13.0 | 14.0 | 8.0 | 6.5 | 7.0 | 2.0 | .5 | 1.0 | .0 | .0 | .0 |
| 9 | 14.5 | 13.5 | 14.0 | 6.5 | 5.5 | 6.0 | 2.0 | 1.5 | 2.0 | .0 | .0 | .0 |
| 10 | 14.0 | 12.5 | 13.5 | 6.0 | 4.5 | 5.5 | 1.5 | 1.0 | 1.5 | .0 | .0 | .0 |
| 11 | 14.5 | 13.0 | 13.5 | 4.5 | 3.0 | 3.5 | 1.0 | .0 | .0 | .0 | .0 | .0 |
| 12 | 13.0 | 12.0 | 12.5 | 3.0 | 2.5 | 3.0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 13 | 12.5 | 11.0 | 11.5 | 3.0 | 2.0 | 3.0 | .5 | .0 | .0 | .0 | .0 | .0 |
| 14 | 11.0 | 10.0 | 10.5 | 4.5 | 3.0 | 3.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 15 | 11.5 | 10.5 | 11.0 | 5.0 | 4.0 | 4.5 | .5 | .0 | .0 | .0 | .0 | .0 |
| 16 | 12.0 | 10.5 | 11.0 | 4.0 | 3.0 | 4.0 | .5 | .0 | .0 | .0 | .0 | .0 |
| 17 | 13.5 | 11.5 | 12.5 | 3.0 | 1.0 | 2.5 | .5 | .0 | .0 | .0 | .0 | .0 |
| 18 | 14.0 | 13.0 | 13.5 | 1.5 | 1.0 | 1.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 19 | 15.0 | 13.0 | 14.0 | 1.5 | 1.0 | 1.0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 20 | 13.0 | 12.0 | 13.0 | 2.5 | .5 | 1.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 21 | 12.0 | 10.5 | 11.5 | 2.0 | 1.0 | 1.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 22 | 10.5 | 9.0 | 10.0 | 3.5 | 1.5 | 2.5 | .5 | .0 | .0 | .0 | .0 | .0 |
| 23 | 9.0 | 8.0 | 8.5 | 2.5 | 1.0 | 2.0 | .5 | .0 | .0 | .0 | .0 | .0 |
| 24 | 8.0 | 7.0 | 7.5 | 3.0 | 2.0 | 2.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 25 | 8.5 | 8.0 | 8.0 | 3.5 | 3.0 | 3.0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 26 | 8.0 | 7.0 | 7.5 | 3.0 | 2.5 | 2.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 27 | 7.0 | 6.5 | 7.0 | 2.5 | 2.0 | 2.0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 28 | 7.5 | 6.5 | 7.0 | 2.5 | 2.0 | 2.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 29 | 7.0 | 5.5 | 6.5 | 2.5 | 2.5 | 2.5 | .5 | .0 | .0 | .0 | .0 | .0 |
| 30 | 6.5 | 5.0 | 5.5 | 3.0 | 2.0 | 2.5 | .5 | .0 | .0 | .0 | .0 | .0 |
| 31 | 6.5 | 4.0 | 5.0 | --- | --- | --- | .0 | .0 | .0 | .0 | .0 | .0 |
| MONTH | 18.5 | 4.0 | 11.5 | 8.0 | .5 | 3.5 | 4.5 | .0 | .5 | .0 | .0 | .0 |

## 01432160 DELAWARE RIVER AT BARRYVILLE, NY--Continued

### TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | .0 | .0 | .0 | 3.5 | 3.5 | 3.5 | 12.5 | 7.5 | 10.0 | 12.5 | 11.0 | 11.5 |
| 2 | .0 | .0 | .0 | 3.5 | 2.0 | 3.0 | 11.5 | 9.0 | 10.0 | 13.0 | 11.0 | 12.0 |
| 3 | .0 | .0 | .0 | 2.5 | .5 | 1.5 | 12.0 | 8.5 | 10.0 | 14.5 | 10.5 | 12.5 |
| 4 | .0 | .0 | .0 | 3.0 | 1.0 | 2.5 | 12.5 | 10.5 | 11.5 | 15.5 | 10.5 | 13.5 |
| 5 | .0 | .0 | .0 | 2.5 | 1.0 | 2.0 | 12.5 | 12.0 | 12.5 | 17.0 | 14.0 | 16.0 |
| 6 | .0 | .0 | .0 | 3.0 | 1.0 | 2.0 | 12.0 | 9.0 | 10.5 | 16.5 | 14.0 | 15.5 |
| 7 | .5 | .0 | .0 | 2.5 | 1.5 | 2.0 | 10.5 | 8.0 | 9.5 | 15.0 | 12.5 | 13.5 |
| 8 | .5 | .0 | .0 | 3.0 | 2.0 | 2.5 | 12.5 | 8.5 | 10.5 | 15.0 | 12.0 | 14.0 |
| 9 | .0 | .0 | .0 | 4.0 | 2.5 | 3.5 | 12.0 | 11.0 | 11.5 | 16.5 | 13.0 | 15.0 |
| 10 | .0 | .0 | .0 | 4.5 | 3.0 | 3.5 | 13.0 | 10.0 | 11.5 | 17.5 | 14.0 | 16.0 |
| 11 | .5 | .0 | .5 | 4.0 | 2.5 | 3.5 | 12.5 | 11.0 | 11.5 | 16.5 | 14.5 | 16.0 |
| 12 | .0 | .0 | .0 | 4.0 | 2.5 | 3.5 | 13.0 | 12.0 | 12.0 | 14.5 | 13.0 | 14.0 |
| 13 | .5 | .0 | .5 | 5.5 | 3.5 | 4.5 | 13.5 | 11.0 | 12.0 | 13.5 | 11.5 | 12.5 |
| 14 | .5 | .0 | .0 | 3.5 | 1.5 | 2.5 | 11.0 | 9.0 | 10.0 | 14.5 | 12.0 | 13.0 |
| 15 | 1.0 | .0 | .5 | 5.0 | 1.0 | 3.0 | 9.5 | 8.0 | 8.5 | 15.5 | 14.0 | 14.5 |
| 16 | 1.5 | .0 | 1.5 | 4.0 | 1.5 | 3.5 | 10.5 | 7.0 | 8.5 | 14.5 | 14.0 | 14.0 |
| 17 | 3.5 | 1.5 | 3.0 | 2.5 | .0 | 1.5 | 10.0 | 8.5 | 9.0 | 14.0 | 12.5 | 13.5 |
| 18 | 4.0 | 3.0 | 3.5 | 2.0 | .0 | 1.0 | 12.5 | 9.5 | 11.0 | 14.0 | 12.0 | 13.0 |
| 19 | 3.5 | 3.0 | 3.5 | 2.5 | .0 | 1.0 | 12.5 | 10.5 | 11.5 | 13.5 | 12.0 | 13.0 |
| 20 | 4.0 | 3.5 | 3.5 | 2.5 | .5 | 1.0 | 12.5 | 10.0 | 11.5 | 15.0 | 11.5 | 13.0 |
| 21 | 5.0 | 3.0 | 3.5 | 3.0 | .0 | 1.5 | 10.5 | 8.0 | 9.5 | 15.5 | 13.0 | 14.5 |
| 22 | 5.5 | 5.0 | 5.0 | 7.5 | .0 | 3.0 | 11.5 | 8.0 | 9.5 | 17.5 | 14.5 | 16.0 |
| 23 | 5.5 | 5.0 | 5.5 | 7.0 | 2.0 | 4.0 | 10.5 | 9.0 | 9.5 | 19.0 | 15.5 | 17.0 |
| 24 | 5.5 | 4.5 | 5.0 | 7.5 | 3.0 | 5.0 | 10.5 | 9.0 | 9.5 | 19.5 | 16.0 | 18.0 |
| 25 | 4.5 | 4.0 | 4.5 | 7.5 | 3.5 | 5.0 | 10.0 | 8.5 | 9.0 | 20.5 | 17.5 | 19.0 |
| 26 | 4.0 | 3.0 | 3.5 | 9.5 | 3.0 | 6.0 | 10.5 | 8.0 | 9.0 | 22.0 | 19.5 | 20.5 |
| 27 | 4.5 | 3.0 | 3.5 | 9.0 | 5.0 | 6.5 | 13.0 | 9.5 | 11.0 | 23.0 | 20.0 | 21.5 |
| 28 | 3.5 | 3.0 | 3.0 | 11.5 | 3.5 | 7.0 | 13.0 | 10.0 | 12.0 | 22.5 | 19.5 | 21.0 |
| 29 | --- | --- | --- | 14.0 | 5.0 | 9.0 | 14.0 | 12.0 | 13.0 | 21.0 | 18.5 | 20.0 |
| 30 | --- | --- | --- | 11.0 | 8.0 | 9.5 | 13.5 | 11.5 | 12.5 | 23.5 | 18.0 | 21.0 |
| 31 | --- | --- | --- | 12.5 | 8.0 | 10.0 | --- | --- | --- | 23.5 | 20.5 | 22.0 |
| MONTH | 5.5 | .0 | 2.0 | 14.0 | .0 | 4.0 | 14.0 | 7.0 | 10.5 | 23.5 | 10.5 | 15.5 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 23.5 | 18.5 | 20.5 | 25.0 | 19.5 | 22.0 | 27.0 | 20.5 | 23.5 | 21.5 | 19.5 | 20.5 |
| 2 | 19.5 | 17.0 | 18.5 | 26.5 | 20.0 | 22.5 | 26.5 | 23.0 | 25.0 | 21.5 | 20.5 | 20.5 |
| 3 | 17.5 | 16.0 | 17.0 | 27.0 | 20.5 | 23.5 | 26.0 | 23.0 | 24.5 | 21.5 | 20.0 | 20.5 |
| 4 | 20.5 | 16.0 | 18.0 | 24.0 | 21.0 | 22.5 | 29.0 | 22.0 | 24.5 | 20.0 | 19.0 | 19.5 |
| 5 | 20.5 | 17.0 | 19.0 | 26.5 | 21.0 | 24.0 | 26.0 | 22.0 | 24.0 | 20.5 | 18.5 | 19.5 |
| 6 | 24.0 | 17.5 | 20.5 | 27.0 | 23.0 | 24.5 | 25.5 | 21.5 | 23.5 | 20.0 | 19.0 | 19.5 |
| 7 | 22.5 | 19.0 | 20.5 | 29.0 | 22.5 | 25.0 | 28.0 | 21.5 | 24.0 | 19.5 | 19.0 | 19.5 |
| 8 | 24.0 | 16.5 | 19.5 | 30.0 | 22.0 | 25.5 | 24.0 | 22.5 | 23.5 | 20.0 | 19.0 | 19.5 |
| 9 | 23.5 | 18.0 | 20.0 | 31.5 | 22.0 | 25.5 | 26.0 | 22.0 | 23.5 | 21.0 | 17.5 | 19.0 |
| 10 | 21.0 | 17.0 | 19.0 | 29.5 | 22.5 | 26.0 | 27.5 | 22.5 | 24.5 | 21.0 | 16.5 | 18.5 |
| 11 | 23.0 | 16.0 | 19.0 | 31.0 | 20.0 | 25.5 | 28.5 | 21.5 | 24.0 | 24.5 | 17.5 | 20.0 |
| 12 | 25.5 | 16.0 | 20.0 | 31.0 | 25.5 | 28.0 | 26.0 | 23.0 | 24.0 | 26.5 | 18.5 | 22.0 |
| 13 | 27.0 | 17.5 | 22.0 | 29.5 | 25.0 | 27.0 | 26.5 | 21.5 | 23.5 | 23.5 | 19.5 | 21.5 |
| 14 | 22.0 | 20.5 | 21.0 | 27.0 | 22.0 | 24.0 | 27.0 | 22.0 | 24.0 | 23.5 | 20.0 | 21.5 |
| 15 | 23.0 | 20.0 | 21.0 | 27.0 | 19.0 | 23.0 | 25.0 | 22.5 | 23.5 | 21.5 | 20.0 | 21.0 |
| 16 | 24.5 | 19.5 | 22.0 | 27.5 | 19.0 | 23.0 | 25.5 | 22.5 | 23.5 | 20.5 | 18.0 | 19.5 |
| 17 | 24.5 | 21.0 | 23.0 | 29.5 | 20.5 | 24.5 | 23.0 | 20.0 | 21.5 | 19.5 | 17.0 | 18.5 |
| 18 | 25.5 | 19.0 | 22.0 | 28.0 | 21.5 | 25.0 | 24.0 | 18.5 | 21.0 | 23.0 | 17.0 | 19.0 |
| 19 | 25.5 | 19.0 | 22.0 | 28.0 | 24.0 | 25.5 | 24.5 | 19.5 | 21.5 | 19.0 | 17.5 | 18.0 |
| 20 | 23.0 | 20.0 | 21.0 | 25.0 | 22.5 | 24.0 | 25.0 | 19.5 | 22.0 | 17.5 | 16.5 | 17.0 |
| 21 | 25.5 | 20.5 | 23.0 | 27.0 | 22.0 | 24.0 | 24.5 | 19.5 | 22.0 | 19.0 | 15.5 | 17.0 |
| 22 | 25.0 | 22.5 | 23.5 | 26.5 | 22.0 | 23.5 | 22.5 | 20.5 | 21.5 | 20.0 | 17.0 | 18.0 |
| 23 | 23.0 | 20.5 | 21.5 | 27.5 | 19.5 | 23.0 | 23.5 | 19.0 | 21.0 | 17.5 | 14.5 | 15.5 |
| 24 | 22.5 | 19.5 | 21.5 | 28.5 | 18.5 | 22.5 | 22.0 | 20.0 | 21.0 | 15.0 | 13.0 | 13.5 |
| 25 | 24.0 | 21.0 | 22.0 | 24.0 | 19.5 | 22.0 | 22.0 | 19.0 | 20.5 | 19.0 | 12.5 | 15.0 |
| 26 | 21.5 | 17.5 | 20.0 | 24.0 | 23.0 | 23.5 | 24.5 | 20.0 | 22.0 | 17.0 | 14.5 | 15.5 |
| 27 | 23.5 | 16.0 | 20.0 | 27.0 | 23.0 | 24.0 | 23.5 | 20.0 | 21.5 | 16.5 | 14.0 | 15.5 |
| 28 | 25.0 | 18.5 | 21.5 | 25.0 | 19.5 | 21.5 | 22.5 | 20.5 | 21.5 | 16.5 | 16.0 | 16.0 |
| 29 | 26.0 | 20.0 | 22.0 | 25.0 | 20.0 | 21.5 | 20.5 | 20.0 | 20.5 | 17.5 | 13.0 | 15.0 |
| 30 | 28.5 | 19.0 | 23.0 | 25.5 | 18.0 | 21.0 | 21.5 | 19.0 | 20.5 | 15.0 | 12.5 | 14.0 |
| 31 | --- | --- | --- | 27.5 | 19.0 | 22.5 | 21.0 | 20.0 | 20.5 | --- | --- | --- |
| MONTH | 28.5 | 16.0 | 21.0 | 31.5 | 18.0 | 24.0 | 29.0 | 18.5 | 22.5 | 26.5 | 12.5 | 18.5 |

## 01432805 DELAWARE RIVER AT POND EDDY, NY

LOCATION.--Lat 41°26'20", long 74°49'11", Pike County, Pa. Hydrologic Unit 02040104, at interstate bridge, at Pond Eddy, 450 ft (137 m) downstream from Mill Brook and 4.5 mi (7.2 km) upstream from Mongaup River.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1973 to current year.

INSTRUMENTATION.--Temperature recorder since October 1973.

REMARKS.--Temperature probe may be influenced by solar radiation during periods of low flow. No record Jan. 13 to Feb. 3 and Feb. 12 to Mar. 27, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1976, 1978, 1980-81) 31.0°C July 21, 1980; minimum (water years 1974, 1977-78, 1980), freezing point on many days during winter periods, except 1978 and 1980.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum 30.0°C July 12, 13.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 19.5 | 17.5 | 18.0 | 5.5 | 5.5 | 5.5 | 3.0 | 2.5 | 2.5 | .5 | .5 | .5 |
| 2 | 18.0 | 17.0 | 17.5 | 5.5 | 5.0 | 5.0 | 4.0 | 3.0 | 3.5 | .5 | .5 | .5 |
| 3 | 17.0 | 16.0 | 16.5 | 5.5 | 4.5 | 5.0 | 4.0 | 2.0 | 3.5 | .5 | .5 | .5 |
| 4 | 16.5 | 15.5 | 16.0 | 6.0 | 5.0 | 5.5 | 2.0 | .5 | 1.0 | .5 | .5 | .5 |
| 5 | 16.0 | 14.5 | 15.0 | 6.0 | 5.5 | 6.0 | .5 | .5 | .5 | .5 | .5 | .5 |
| 6 | 16.0 | 14.0 | 14.5 | 5.5 | 5.0 | 5.5 | .5 | .5 | .5 | .5 | .5 | .5 |
| 7 | 15.0 | 14.0 | 14.5 | 7.0 | 5.5 | 6.5 | .5 | .5 | .5 | .5 | .5 | .5 |
| 8 | 15.5 | 14.0 | 14.5 | 8.0 | 7.0 | 7.5 | .5 | .5 | .5 | .5 | .5 | .5 |
| 9 | 15.5 | 14.0 | 14.5 | 7.0 | 6.0 | 6.5 | 1.5 | .5 | 1.5 | .5 | .5 | .5 |
| 10 | 14.0 | 13.5 | 14.0 | 6.0 | 5.0 | 6.0 | 1.5 | 1.5 | 1.5 | .5 | .5 | .5 |
| 11 | 14.5 | 14.0 | 14.0 | 5.0 | 3.5 | 4.0 | 1.5 | .5 | 1.0 | .5 | .5 | .5 |
| 12 | 14.0 | 13.0 | 13.5 | 3.5 | 3.0 | 3.0 | .5 | .5 | .5 | .5 | .5 | .5 |
| 13 | 13.0 | 12.0 | 12.5 | 3.0 | 2.5 | 3.0 | .5 | .5 | .5 | --- | --- | --- |
| 14 | 12.0 | 11.0 | 11.5 | 4.0 | 3.0 | 3.5 | .5 | .5 | .5 | --- | --- | --- |
| 15 | 11.5 | 11.0 | 11.5 | 4.5 | 4.0 | 4.0 | .5 | .5 | .5 | --- | --- | --- |
| 16 | 12.5 | 11.0 | 11.5 | 4.5 | 3.5 | 4.0 | .5 | .5 | .5 | --- | --- | --- |
| 17 | 14.0 | 12.0 | 13.0 | 3.5 | 1.5 | 3.0 | .5 | .5 | .5 | --- | --- | --- |
| 18 | 14.5 | 13.5 | 14.0 | 1.5 | 1.0 | 1.0 | .5 | .5 | .5 | --- | --- | --- |
| 19 | 15.0 | 14.0 | 14.5 | 1.5 | 1.0 | 1.5 | .5 | .5 | .5 | --- | --- | --- |
| 20 | 14.5 | 13.5 | 14.0 | 1.5 | 1.0 | 1.5 | .5 | .5 | .5 | --- | --- | --- |
| 21 | 13.5 | 12.0 | 13.0 | 1.5 | 1.0 | 1.0 | .5 | .5 | .5 | --- | --- | --- |
| 22 | 12.0 | 10.5 | 11.0 | 2.5 | 1.5 | 2.0 | .5 | .5 | .5 | --- | --- | --- |
| 23 | 10.5 | 9.0 | 9.5 | 2.5 | 1.5 | 2.0 | .5 | .5 | .5 | --- | --- | --- |
| 24 | 9.0 | 8.0 | 9.0 | 2.0 | 1.5 | 2.0 | .5 | .5 | .5 | --- | --- | --- |
| 25 | 8.5 | 8.5 | 8.5 | 3.0 | 2.0 | 2.5 | .5 | .5 | .5 | --- | --- | --- |
| 26 | 8.5 | 8.0 | 8.5 | 3.0 | 3.0 | 3.0 | .5 | .5 | .5 | --- | --- | --- |
| 27 | 8.0 | 7.5 | 8.0 | 3.0 | 2.5 | 2.5 | .5 | .5 | .5 | --- | --- | --- |
| 28 | 8.0 | 7.5 | 8.0 | 2.5 | 2.5 | 2.5 | .5 | .5 | .5 | --- | --- | --- |
| 29 | 7.5 | 7.0 | 7.0 | 2.5 | 2.5 | 2.5 | .5 | .5 | .5 | --- | --- | --- |
| 30 | 7.0 | 6.5 | 6.5 | 2.5 | 2.5 | 2.5 | .5 | .5 | .5 | --- | --- | --- |
| 31 | 6.5 | 5.0 | 5.5 | --- | --- | --- | .5 | .5 | .5 | --- | --- | --- |
| MONTH | 19.5 | 5.0 | 12.0 | 8.0 | 1.0 | 3.5 | 4.0 | .5 | 1.0 | .5 | .5 | .5 |

## 01432805 DELAWARE RIVER AT POND EDDY, NY--Continued

### TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | --- | --- | --- | --- | --- | --- | 11.0 | 10.5 | 10.5 | 12.5 | 11.5 | 12.0 |
| 2 | --- | --- | --- | --- | --- | --- | 11.5 | 10.0 | 11.0 | 12.0 | 11.5 | 11.5 |
| 3 | --- | --- | --- | --- | --- | --- | 11.5 | 10.0 | 11.0 | 13.5 | 11.5 | 12.5 |
| 4 | .5 | .5 | .5 | --- | --- | --- | 12.5 | 11.5 | 12.0 | 14.5 | 12.5 | 13.5 |
| 5 | .5 | .5 | .5 | --- | --- | --- | 13.0 | 12.5 | 12.5 | 17.0 | 14.5 | 15.5 |
| 6 | .5 | .5 | .5 | --- | --- | --- | 12.5 | 10.0 | 11.5 | 16.5 | 15.0 | 16.0 |
| 7 | .5 | .5 | .5 | --- | --- | --- | 11.0 | 9.0 | 10.0 | 15.0 | 13.0 | 14.0 |
| 8 | .5 | .5 | .5 | --- | --- | --- | 12.0 | 10.0 | 11.0 | 15.0 | 13.0 | 14.0 |
| 9 | .5 | .5 | .5 | --- | --- | --- | 12.0 | 11.5 | 12.0 | 16.0 | 13.5 | 15.0 |
| 10 | .5 | .5 | .5 | --- | --- | --- | 13.0 | 11.0 | 12.0 | 16.5 | 14.5 | 15.5 |
| 11 | .5 | .5 | .5 | --- | --- | --- | 12.5 | 12.5 | 12.5 | 16.5 | 14.5 | 16.0 |
| 12 | --- | --- | --- | --- | --- | --- | 13.0 | 12.5 | 12.5 | 14.5 | 13.0 | 14.0 |
| 13 | --- | --- | --- | --- | --- | --- | 13.5 | 12.0 | 12.5 | 13.0 | 12.0 | 13.0 |
| 14 | --- | --- | --- | --- | --- | --- | 12.5 | 10.0 | 11.0 | 14.0 | 12.5 | 13.5 |
| 15 | --- | --- | --- | --- | --- | --- | 10.0 | 9.0 | 9.5 | 15.0 | 14.0 | 15.0 |
| 16 | --- | --- | --- | --- | --- | --- | 10.0 | 8.0 | 9.5 | 14.5 | 14.0 | 14.5 |
| 17 | --- | --- | --- | --- | --- | --- | 10.0 | 9.5 | 9.5 | 14.0 | 13.0 | 13.5 |
| 18 | --- | --- | --- | --- | --- | --- | 12.5 | 10.0 | 11.5 | 14.0 | 13.0 | 13.5 |
| 19 | --- | --- | --- | --- | --- | --- | 12.5 | 11.5 | 12.0 | 13.5 | 12.5 | 13.0 |
| 20 | --- | --- | --- | --- | --- | --- | 12.5 | 10.0 | 12.0 | 15.0 | 12.0 | 13.5 |
| 21 | --- | --- | --- | --- | --- | --- | 10.5 | 9.5 | 10.0 | 15.5 | 13.5 | 14.5 |
| 22 | --- | --- | --- | --- | --- | --- | 11.5 | 9.5 | 10.5 | 17.5 | 15.0 | 16.0 |
| 23 | --- | --- | --- | --- | --- | --- | 11.0 | 9.5 | 10.5 | 18.5 | 16.0 | 17.5 |
| 24 | --- | --- | --- | --- | --- | --- | 10.5 | 9.5 | 10.0 | 19.0 | 17.0 | 18.0 |
| 25 | --- | --- | --- | --- | --- | --- | 10.5 | 9.0 | 9.5 | 21.0 | 18.5 | 19.5 |
| 26 | --- | --- | --- | --- | --- | --- | 10.5 | 9.0 | 9.5 | 22.0 | 20.0 | 20.5 |
| 27 | --- | --- | --- | --- | --- | --- | 12.0 | 10.5 | 11.0 | 23.0 | 21.0 | 21.5 |
| 28 | --- | --- | --- | 9.5 | 6.0 | 7.5 | 12.0 | 11.0 | 11.5 | 23.0 | 22.0 | 22.0 |
| 29 | --- | --- | --- | 11.0 | 7.0 | 9.5 | 13.5 | 12.0 | 12.5 | 22.0 | 20.0 | 20.5 |
| 30 | --- | --- | --- | 10.5 | 9.5 | 10.0 | 13.5 | 12.5 | 13.0 | 23.0 | 19.5 | 21.0 |
| 31 | --- | --- | --- | 12.0 | 10.0 | 11.0 | --- | --- | --- | 23.5 | 22.0 | 22.5 |
| MONTH | .5 | .5 | .5 | 12.0 | 6.0 | 9.5 | 13.5 | 8.0 | 11.0 | 23.5 | 11.5 | 16.0 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 23.5 | 20.0 | 21.5 | 24.0 | 22.5 | 23.0 | 25.5 | 22.0 | 23.5 | 22.0 | 20.0 | 21.0 |
| 2 | 21.0 | 19.0 | 19.5 | 24.5 | 22.0 | 23.0 | 27.0 | 23.5 | 24.5 | 21.5 | 20.5 | 21.0 |
| 3 | 19.0 | 17.5 | 17.5 | 25.5 | 22.0 | 23.5 | 26.0 | 24.0 | 24.5 | 21.0 | 20.5 | 20.5 |
| 4 | 20.0 | 17.0 | 18.5 | 24.0 | 23.0 | 23.5 | 27.0 | 23.0 | 24.5 | 20.5 | 19.5 | 20.0 |
| 5 | 21.5 | 18.5 | 20.0 | 25.0 | 22.5 | 23.5 | 26.0 | 24.0 | 25.0 | 21.0 | 19.0 | 19.5 |
| 6 | 22.0 | 19.5 | 20.5 | 27.0 | 23.5 | 24.5 | 25.0 | 22.5 | 24.0 | 20.5 | 19.5 | 20.0 |
| 7 | 23.0 | 21.0 | 21.5 | 27.5 | 23.5 | 25.0 | 26.5 | 22.0 | 24.0 | 20.0 | 19.5 | 20.0 |
| 8 | 24.0 | 19.5 | 21.5 | 28.5 | 24.0 | 26.0 | 24.5 | 23.0 | 23.5 | 20.0 | 19.5 | 19.5 |
| 9 | 22.5 | 20.5 | 21.5 | 29.0 | 25.0 | 26.5 | 25.5 | 22.5 | 23.5 | 20.5 | 18.5 | 19.5 |
| 10 | 21.5 | 20.0 | 20.5 | 28.5 | 24.5 | 26.5 | 27.5 | 23.5 | 25.0 | 20.5 | 17.5 | 19.0 |
| 11 | 22.0 | 18.5 | 20.0 | 28.5 | 24.5 | 26.5 | 27.0 | 23.5 | 25.0 | 23.0 | 18.5 | 20.0 |
| 12 | 22.5 | 19.5 | 21.0 | 30.0 | 25.0 | 27.0 | 25.0 | 24.0 | 24.5 | 23.5 | 20.5 | 21.5 |
| 13 | 24.5 | 20.0 | 22.0 | 30.0 | 26.5 | 28.0 | 25.0 | 23.5 | 24.0 | 24.0 | 20.5 | 22.0 |
| 14 | 23.0 | 21.5 | 22.0 | 27.5 | 25.0 | 26.0 | 26.0 | 23.0 | 24.5 | 24.0 | 21.0 | 22.0 |
| 15 | 24.0 | 21.0 | 21.5 | 26.0 | 22.5 | 24.0 | 25.0 | 24.0 | 24.5 | 22.5 | 21.5 | 22.0 |
| 16 | 24.5 | 20.5 | 22.5 | 26.0 | 22.0 | 23.5 | 25.5 | 23.5 | 24.0 | 21.5 | 20.0 | 20.5 |
| 17 | 25.0 | 22.5 | 23.5 | 27.0 | 22.5 | 24.5 | 24.0 | 21.0 | 22.5 | 20.0 | 19.0 | 19.5 |
| 18 | 25.0 | 21.0 | 23.0 | 26.0 | 23.0 | 24.5 | 24.0 | 19.5 | 21.5 | 21.0 | 18.5 | 19.0 |
| 19 | 25.0 | 21.5 | 23.0 | 27.0 | 24.5 | 25.5 | 24.5 | 20.0 | 21.5 | 19.0 | 18.0 | 18.5 |
| 20 | 24.0 | 21.5 | 22.5 | 25.5 | 24.5 | 25.0 | 24.0 | 20.5 | 22.0 | 18.5 | 17.0 | 17.5 |
| 21 | 24.5 | 21.5 | 22.5 | 25.0 | 23.0 | 24.0 | 24.5 | 20.5 | 22.0 | 18.5 | 16.0 | 17.0 |
| 22 | 25.0 | 23.0 | 24.0 | 26.0 | 22.5 | 24.0 | 23.0 | 21.5 | 22.0 | 18.5 | 17.0 | 18.0 |
| 23 | 24.0 | 22.0 | 22.5 | 26.0 | 21.5 | 23.5 | 24.0 | 20.0 | 21.5 | 17.5 | 15.5 | 17.0 |
| 24 | 23.5 | 21.0 | 22.0 | 25.5 | 22.0 | 23.5 | 22.0 | 21.0 | 21.5 | 15.5 | 14.0 | 14.5 |
| 25 | 23.0 | 22.0 | 22.5 | 24.0 | 22.0 | 23.0 | 21.5 | 20.0 | 20.5 | 17.5 | 13.5 | 15.0 |
| 26 | 22.0 | 20.0 | 21.0 | 24.0 | 22.0 | 22.5 | 24.5 | 20.0 | 22.0 | 17.0 | 15.0 | 16.0 |
| 27 | 22.5 | 18.5 | 20.0 | 26.5 | 23.0 | 24.0 | 23.5 | 21.0 | 22.0 | 17.5 | 15.0 | 16.0 |
| 28 | 24.5 | 19.0 | 21.5 | 25.5 | 22.5 | 23.5 | 23.0 | 21.5 | 22.0 | 17.0 | 16.0 | 16.5 |
| 29 | 25.0 | 21.0 | 22.5 | 23.0 | 21.0 | 22.0 | 21.5 | 20.5 | 21.0 | 17.0 | 14.5 | 15.5 |
| 30 | 26.0 | 21.0 | 23.0 | 24.0 | 19.5 | 21.5 | 21.5 | 20.0 | 21.0 | 16.0 | 14.0 | 14.5 |
| 31 | --- | --- | --- | 26.0 | 20.5 | 22.5 | 21.5 | 20.5 | 21.0 | --- | --- | --- |
| MONTH | 26.0 | 17.0 | 21.5 | 30.0 | 19.5 | 24.5 | 27.5 | 19.5 | 23.0 | 24.0 | 13.5 | 19.0 |

## 01433500 MONGAUP RIVER NEAR MONGAUP, NY

LOCATION.--Lat 41°27'41", long 74°45'33", Sullivan County, Hydrologic Unit 02040104, on right bank 300 ft (91 m) downstream from Rio hydroelectric plant of Orange and Rockland Utilities, Inc., 0.5 mi (0.8 km) downstream from Bush Kill, and 2.8 mi (4.5 km) upstream from mouth and Mongaup.

DRAINAGE AREA.--202 mi$^2$ (523 km$^2$).

PERIOD OF RECORD.--August 1939 to current year.

REVISED RECORDS.--WRD NY 1971: 1970.

GAGE.--Water-stage recorder. Datum of gage is 625.05 ft (190.515 m) Orange and Rockland Utilities, Inc. datum. Prior to July 6, 1956, water-stage recorders at sites 25 ft (8 m) upstream on Rio Tailrace and 200 ft (61 m) upstream on natural channel, at datum 4.0 ft (1.22 m) higher.

REMARKS.--Records poor. Flow regulated by storage in Cliff Lake, Swinging Bridge, and Toronto Reservoirs (see Reservoirs in Delaware River Basin) and small reservoirs above station.

AVERAGE DISCHARGE.--42 years, 340 ft$^3$/s (9.63 m$^3$/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,900 ft$^3$/s (450 m$^3$/s) Aug. 19, 1955; maximum daily, 12,300 ft$^3$/s (348 m$^3$/s), Aug. 19, 1955; minimum daily, 6 ft$^3$/s (0.17 m$^3$/s) Oct. 1, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,890 ft$^3$/s (110 m$^3$/s) Feb. 21, gage height, 6.64 ft (2.024 m); minimum daily, 19 ft$^3$/s (0.54 m$^3$/s) Nov. 13.

REVISIONS.--Revised figures of discharge for the water year 1980, superceding those published in the report for 1980 are given herein.

EXTREMES FOR 1980 WATER YEAR.--Maximum discharge, 4,140 ft$^3$/s (117 m$^3$/s) Mar. 23, gage height, 6.77 ft (2.063 m); minimum daily, 32 ft$^3$/s (0.91 m$^3$/s) Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 50 | 669 | 566 | 159 | 51 | 134 | 931 | 889 | 73 | 183 | 217 | 43 |
| 2 | 59 | 639 | 405 | 186 | 48 | 70 | 931 | 795 | 114 | 328 | 159 | 183 |
| 3 | 58 | 429 | 512 | 365 | 46 | 56 | 889 | 775 | 171 | 373 | 77 | 171 |
| 4 | 61 | 249 | 705 | 349 | 45 | 51 | 901 | 336 | 341 | 190 | 94 | 143 |
| 5 | 84 | 256 | 705 | 221 | 44 | 50 | 919 | 346 | 323 | 79 | 286 | 96 |
| 6 | 592 | 669 | 701 | 94 | 44 | 50 | 871 | 710 | 323 | 70 | 405 | 61 |
| 7 | 949 | 719 | 696 | 132 | 43 | 48 | 824 | 701 | 411 | 164 | 373 | 50 |
| 8 | 860 | 705 | 310 | 354 | 43 | 58 | 775 | 519 | 267 | 305 | 320 | 42 |
| 9 | 701 | 526 | 122 | 305 | 42 | 64 | 895 | 303 | 166 | 365 | 169 | 38 |
| 10 | 387 | 159 | 269 | 172 | 42 | 56 | 1180 | 209 | 341 | 382 | 64 | 37 |
| 11 | 494 | 127 | 652 | 91 | 41 | 58 | 1050 | 99 | 484 | 357 | 154 | 63 |
| 12 | 701 | 256 | 674 | 86 | 41 | 143 | 895 | 242 | 318 | 315 | 352 | 132 |
| 13 | 737 | 464 | 678 | 68 | 40 | 303 | 871 | 471 | 221 | 162 | 365 | 103 |
| 14 | 354 | 293 | 682 | 91 | 40 | 333 | 845 | 435 | 130 | 258 | 346 | 58 |
| 15 | 269 | 129 | 669 | 117 | 43 | 234 | 860 | 379 | 74 | 384 | 384 | 47 |
| 16 | 630 | 154 | 256 | 117 | 154 | 109 | 850 | 283 | 137 | 423 | 172 | 40 |
| 17 | 691 | 267 | 267 | 221 | 111 | 172 | 800 | 155 | 338 | 365 | 64 | 36 |
| 18 | 691 | 140 | 308 | 217 | 78 | 458 | 780 | 111 | 346 | 408 | 185 | 41 |
| 19 | 318 | 103 | 634 | 96 | 63 | 360 | 761 | 185 | 318 | 183 | 164 | 39 |
| 20 | 145 | 194 | 464 | 71 | 55 | 408 | 747 | 279 | 330 | 76 | 67 | 36 |
| 21 | 113 | 435 | 320 | 61 | 51 | 354 | 728 | 272 | 267 | 195 | 51 | 35 |
| 22 | 125 | 269 | 242 | 145 | 72 | 2480 | 678 | 276 | 209 | 607 | 43 | 72 |
| 23 | 341 | 162 | 141 | 354 | 183 | 2860 | 426 | 234 | 81 | 344 | 40 | 97 |
| 24 | 678 | 227 | 108 | 360 | 113 | 1730 | 701 | 145 | 56 | 357 | 37 | 52 |
| 25 | 669 | 118 | 130 | 357 | 78 | 1680 | 710 | 93 | 48 | 373 | 97 | 44 |
| 26 | 665 | 360 | 149 | 215 | 64 | 1750 | 325 | 72 | 44 | 197 | 290 | 44 |
| 27 | 267 | 1090 | 127 | 87 | 55 | 1420 | 127 | 59 | 44 | 74 | 288 | 40 |
| 28 | 114 | 949 | 112 | 65 | 51 | 907 | 333 | 51 | 40 | 55 | 286 | 34 |
| 29 | 262 | 845 | 93 | 56 | 80 | 937 | 860 | 65 | 44 | 47 | 149 | 32 |
| 30 | 634 | 766 | 86 | 51 | --- | 987 | 883 | 164 | 76 | 161 | 65 | 32 |
| 31 | 669 | --- | 116 | 48 | --- | 950 | --- | 88 | --- | 157 | 50 | --- |
| TOTAL | 13368 | 12368 | 11899 | 5311 | 1861 | 19270 | 23346 | 9741 | 6135 | 7937 | 5813 | 1941 |
| MEAN | 431 | 412 | 384 | 171 | 64.2 | 622 | 778 | 314 | 205 | 256 | 188 | 64.7 |
| MAX | 949 | 1090 | 705 | 365 | 183 | 2860 | 1180 | 889 | 484 | 607 | 405 | 183 |
| MIN | 50 | 103 | 86 | 48 | 40 | 48 | 127 | 51 | 40 | 47 | 37 | 32 |

CAL YR 1979 TOTAL 166718 MEAN 457 MAX 2420 MIN 20
WTR YR 1980 TOTAL 118990 MEAN 325 MAX 2860 MIN 32

## 01433500 MONGAUP RIVER NEAR MONGAUP, NY (Continued)

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 32 | 30 | 44 | 47 | 26 | 733 | 48 | 362 | 280 | 150 | 60 | 161 |
| 2 | 32 | 207 | 41 | 44 | 57 | 696 | 220 | 200 | 290 | 118 | 52 | 171 |
| 3 | 51 | 140 | 211 | 39 | 88 | 305 | 298 | 118 | 195 | 157 | 250 | 172 |
| 4 | 63 | 57 | 150 | 43 | 72 | 230 | 215 | 240 | 203 | 286 | 315 | 192 |
| 5 | 46 | 45 | 57 | 80 | 61 | 600 | 76 | 308 | 171 | 161 | 295 | 112 |
| 6 | 40 | 40 | 40 | 295 | 51 | 500 | 180 | 371 | 130 | 120 | 320 | 74 |
| 7 | 37 | 38 | 34 | 310 | 80 | 288 | 540 | 349 | 90 | 122 | 338 | 53 |
| 8 | 35 | 39 | 33 | 185 | 85 | 123 | 498 | 371 | 70 | 199 | 225 | 132 |
| 9 | 34 | 42 | 36 | 219 | 68 | 220 | 501 | 210 | 56 | 247 | 126 | 231 |
| 10 | 34 | 44 | 37 | 143 | 80 | 393 | 313 | 103 | 49 | 288 | 200 | 192 |
| 11 | 34 | 49 | 38 | 56 | 215 | 357 | 90 | 500 | 44 | 180 | 234 | 178 |
| 12 | 34 | 40 | 34 | 171 | 396 | 384 | 74 | 2200 | 42 | 118 | 215 | 102 |
| 13 | 34 | 19 | 77 | 256 | 247 | 362 | 130 | 2590 | 200 | 230 | 213 | 56 |
| 14 | 34 | 20 | 130 | 258 | 179 | 227 | 410 | 2150 | 188 | 256 | 219 | 102 |
| 15 | 30 | 21 | 63 | 262 | 143 | 103 | 396 | 1850 | 236 | 100 | 116 | 169 |
| 16 | 30 | 23 | 51 | 223 | 123 | 260 | 379 | 2450 | 357 | 72 | 70 | 223 |
| 17 | 30 | 21 | 45 | 134 | 274 | 341 | 336 | 2330 | 330 | 52 | 101 | 199 |
| 18 | 30 | 36 | 40 | 59 | 484 | 281 | 267 | 1880 | 154 | 45 | 174 | 178 |
| 19 | 32 | 30 | 169 | 41 | 330 | 143 | 94 | 1360 | 109 | 42 | 152 | 101 |
| 20 | 31 | 24 | 130 | 34 | 1340 | 66 | 250 | 1140 | 120 | 64 | 190 | 54 |
| 21 | 30 | 22 | 62 | 30 | 3500 | 54 | 333 | 1020 | 103 | 70 | 169 | 87 |
| 22 | 31 | 26 | 192 | 29 | 2150 | 50 | 315 | 943 | 300 | 56 | 99 | 159 |
| 23 | 31 | 22 | 333 | 27 | 1900 | 48 | 365 | 820 | 357 | 46 | 57 | 174 |
| 24 | 30 | 66 | 349 | 25 | 1710 | 47 | 417 | 344 | 320 | 43 | 103 | 164 |
| 25 | 47 | 99 | 194 | 25 | 1630 | 46 | 258 | 260 | 295 | 40 | 162 | 162 |
| 26 | 58 | 231 | 75 | 25 | 1290 | 45 | 100 | 558 | 211 | 39 | 192 | 96 |
| 27 | 45 | 171 | 52 | 25 | 1090 | 160 | 350 | 639 | 123 | 150 | 169 | 54 |
| 28 | 40 | 80 | 44 | 25 | 795 | 172 | 408 | 501 | 74 | 290 | 171 | 150 |
| 29 | 36 | 62 | 166 | 25 | --- | 90 | 390 | 438 | 62 | 149 | 113 | 183 |
| 30 | 34 | 50 | 141 | 26 | --- | 60 | 438 | 330 | 160 | 114 | 60 | 176 |
| 31 | 31 | --- | 60 | 26 | --- | 54 | --- | 197 | --- | 76 | 102 | --- |
| TOTAL | 1136 | 1794 | 3128 | 3187 | 18464 | 7438 | 8689 | 27132 | 5319 | 4080 | 5262 | 4257 |
| MEAN | 36.6 | 59.8 | 101 | 103 | 659 | 240 | 290 | 875 | 177 | 132 | 170 | 142 |
| MAX | 63 | 231 | 349 | 310 | 3500 | 733 | 540 | 2590 | 357 | 290 | 338 | 231 |
| MIN | 30 | 19 | 33 | 25 | 26 | 45 | 48 | 103 | 42 | 39 | 52 | 53 |

CAL YR 1980 TOTAL 87413 MEAN 239 MAX 2860 MIN 19
WTR YR 1981 TOTAL 89886 MEAN 246 MAX 3500 MIN 19

## 01434000 DELAWARE RIVER AT PORT JERVIS, NY

LOCATION.--Lat 41°22'14", long 74°41'52", Pike County, Pa., Hydrologic Unit 02040104, on right bank 250 ft (76 m) downstream from bridge (on U.S. Highways 6 and 209) between Port Jervis, N.Y. and Matamoras, Pa., 1.2 mi (1.9 km) upstream from Neversink River, and 6.5 mi (10.5 km) downstream from Mongaup River. Water-quality sampling site at discharge station.

DRAINAGE AREA.--3,076 $mi^2$ (7,967 $km^2$).

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1904 to current year.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1031: 1905-36. WRD NY 1971: 1970.

GAGE.--Water-stage recorder. Datum of gage is 415.35 ft (126.599 m) National Geodetic Vertical Datum of 1929. October 1904 to August 13, 1928, nonrecording gage at bridge 250 ft (76 m) upstream at present datum; operated by U.S. Weather Bureau prior to June 20, 1914.

REMARKS.--Records good. Flow regulated by Lake Wallenpaupack and by Toronto, Cliff Lake, and Swinging Bridge Reservoirs (see Reservoirs in Delaware River Basin) and smaller reservoirs. Large diurnal fluctuations at medium and low flows caused by powerplants on tributary streams. Subsequent to September 1954, entire flow from 371 $mi^2$ (961 $km^2$) of drainage area controlled by Pepacton Reservoir, and subsequent to October 1963, entire flow from 454 $mi^2$ (1,176 $km^2$) of drainage area controlled by Cannonsville Reservoir (see Reservoirs in Delaware River Basin). Part of flow from these reservoirs diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 233,000 $ft^3/s$ (6,600 $m^3/s$) Aug. 19, 1955, gage height, 23.91 ft (7.288 m), from floodmarks in gage house, from rating curve extended above 89,000 $ft^3/s$ (2,520 $m^3/s$) on basis of slope-area measurement of peak flow; maximum gage height, 26.6 ft (8.118 m) Feb. 12, 1981 (ice jam), from floodmarks; minimum observed discharge, 175 $ft^3/s$ (4.96 $m^3/s$) Sept. 23, 1908, gage height, 0.6 ft (0.18 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--The U.S. Weather Bureau reported a discharge of 205,000 $ft^3/s$ (5,810 $m^3/s$) Oct. 10, 1903, gage height, 23.1 ft (7.04 m), from rating curve extended above 70,000 $ft^3/s$ (1,980 $m^3/s$) by velocity-area studies; stage on Mar. 8, 1904, was 25.5 ft (7.77 m), ice jam.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 26.6 ft (8.11 m) Feb. 12 (ice jam), from floodmarks, discharge not determined (ice jam); minimum discharge, 734 $ft^3/s$ (20.8 $m^3/s$) Sept. 13, gage height, 1.66 ft (0.506 m); minimum daily, 1,020 $ft^3/s$ (28.9 $m^3/s$) Oct. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1740 | 1350 | 2850 | 1300 | 1100 | 6400 | 1600 | 7970 | 1870 | 1580 | 1570 | 1580 |
| 2 | 1700 | 1510 | 2530 | 1250 | 1400 | 5660 | 2610 | 6110 | 2220 | 1610 | 1550 | 1660 |
| 3 | 1770 | 1620 | 2860 | 1250 | 4300 | 5020 | 3680 | 4700 | 2220 | 1600 | 1630 | 1620 |
| 4 | 1940 | 1530 | 4090 | 1200 | 7000 | 4540 | 3140 | 4770 | 2450 | 1280 | 1770 | 1650 |
| 5 | 1700 | 1490 | 3120 | 1100 | 5200 | 4510 | 2570 | 3680 | 2820 | 1640 | 1780 | 1600 |
| 6 | 1810 | 1460 | 2400 | 1300 | 3900 | 4260 | 2640 | 3450 | 2390 | 1820 | 1850 | 1670 |
| 7 | 1680 | 1430 | 2560 | 1200 | 3300 | 3450 | 3190 | 3160 | 1530 | 1780 | 1910 | 1760 |
| 8 | 1840 | 1550 | 2550 | 1300 | 3300 | 2730 | 2910 | 2910 | 1430 | 1680 | 1760 | 1930 |
| 9 | 1820 | 1570 | 2440 | 1200 | 3300 | 2890 | 2710 | 2390 | 1760 | 1740 | 1740 | 2300 |
| 10 | 1820 | 1520 | 2630 | 1350 | 2800 | 3210 | 2590 | 2000 | 1740 | 1970 | 1600 | 2140 |
| 11 | 1820 | 1630 | 2660 | 1200 | 4300 | 3040 | 2570 | 2840 | 1780 | 1420 | 1560 | 1910 |
| 12 | 1550 | 1660 | 2270 | 1200 | 40000 | 2920 | 2390 | 20200 | 1680 | 1290 | 1590 | 1520 |
| 13 | 1600 | 1560 | 1900 | 1250 | 20000 | 2780 | 2590 | 32500 | 1570 | 1360 | 1630 | 1420 |
| 14 | 1610 | 1490 | 1880 | 1200 | 10900 | 2440 | 3350 | 16500 | 1460 | 1530 | 1660 | 1720 |
| 15 | 1610 | 1460 | 1460 | 1150 | 8710 | 1900 | 4690 | 12200 | 2500 | 1310 | 1600 | 1720 |
| 16 | 1610 | 1460 | 1440 | 1250 | 6400 | 1970 | 4630 | 21100 | 3390 | 1520 | 1630 | 1690 |
| 17 | 1650 | 1460 | 1190 | 1300 | 5990 | 2290 | 3780 | 18000 | 2540 | 1580 | 1670 | 1180 |
| 18 | 1700 | 1980 | 1680 | 1150 | 7010 | 2050 | 3340 | 12600 | 1940 | 1610 | 1650 | 1110 |
| 19 | 1400 | 1720 | 1710 | 1250 | 9300 | 1780 | 3090 | 9670 | 1710 | 1450 | 1590 | 1620 |
| 20 | 1370 | 1660 | 1780 | 1300 | 17300 | 1760 | 2960 | 7410 | 1630 | 1490 | 1630 | 1590 |
| 21 | 1480 | 1480 | 1270 | 1250 | 42100 | 1680 | 2940 | 6130 | 1330 | 1870 | 1640 | 1650 |
| 22 | 1530 | 1520 | 1300 | 1150 | 22400 | 1290 | 2730 | 5270 | 1420 | 2010 | 1580 | 1740 |
| 23 | 1480 | 1280 | 1650 | 1200 | 15400 | 1400 | 2700 | 4230 | 2070 | 1610 | 1710 | 1750 |
| 24 | 1460 | 1400 | 1850 | 1150 | 17900 | 1330 | 3580 | 2970 | 2180 | 1270 | 1650 | 1790 |
| 25 | 1580 | 2320 | 1750 | 1150 | 16300 | 1270 | 4640 | 2850 | 1940 | 1440 | 1680 | 1770 |
| 26 | 1770 | 7020 | 1400 | 1150 | 11500 | 1220 | 3570 | 3110 | 1610 | 1460 | 1640 | 1630 |
| 27 | 2260 | 5390 | 1450 | 1250 | 9510 | 1250 | 3550 | 2850 | 1340 | 1640 | 1660 | 1650 |
| 28 | 1840 | 3740 | 1400 | 1200 | 7760 | 1270 | 3630 | 2490 | 1380 | 1770 | 1650 | 1750 |
| 29 | 1250 | 3210 | 1600 | 1200 | --- | 1150 | 3960 | 2610 | 1490 | 1610 | 1700 | 1820 |
| 30 | 1020 | 3060 | 1700 | 1150 | --- | 1150 | 6480 | 2270 | 1700 | 1510 | 1650 | 1730 |
| 31 | 1140 | --- | 1600 | 1150 | --- | 1460 | --- | 1750 | --- | 1610 | 1680 | --- |
| TOTAL | 50550 | 61530 | 62970 | 37700 | 308380 | 80070 | 98810 | 230690 | 57090 | 49060 | 51610 | 50670 |
| MEAN | 1631 | 2051 | 2031 | 1216 | 11010 | 2583 | 3294 | 7442 | 1903 | 1583 | 1665 | 1689 |
| MAX | 2260 | 7020 | 4090 | 1350 | 42100 | 6400 | 6480 | 32500 | 3390 | 2010 | 1910 | 2300 |
| MIN | 1020 | 1280 | 1190 | 1100 | 1100 | 1150 | 1600 | 1750 | 1330 | 1270 | 1550 | 1110 |

CAL YR 1980 TOTAL 1247530 MEAN 3409 MAX 59100 MIN 1020
WTR YR 1981 TOTAL 1139130 MEAN 3121 MAX 42100 MIN 1020

## 01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

### WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957-60, 1964 to current year.
CHEMICAL DATA: 1958-59 (e), 1964-65 (c), 1966 (a), 1967-68 (c), 1969-76 (d).
MINOR ELEMENTS DATA: 1970 (a), 1972-73 (a), 1974-76 (c).
PESTICIDE DATA: 1974 (a).
ORGANIC DATA: OC--1974 (b), 1975 (d).
NUTRIENT DATA: 1968 (a), 1969-76 (d).
BIOLOGICAL DATA:
Bacteria--1973-76 (d).
Phytoplankton--1974 (b), 1975-76 (c).
Periphyton--1976 (a).
SEDIMENT DATA: 1959 (c), 1976 (c).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1973 to September 1973.
WATER TEMPERATURES: February 1957 to September 1960, January 1973 to September 1973, June 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: February 1957 to September 1960, March 1970 to June 1976.

INSTRUMENTATION.--Temperature recorder since January 1973.

REMARKS.--No temperature record Feb. 18 to Mar. 18, May 12-14, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1957-59, 1973-81), 30.0°C July 13, 1981; minimum (water years 1958-60, 1973, 1975-81), freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 30.0°C July 13; minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 17.0 | 15.5 | 16.5 | 6.0 | 5.0 | 5.5 | 3.0 | 2.0 | 2.5 | .0 | .0 | .0 |
| 2 | 17.0 | 16.0 | 16.5 | 5.5 | 4.5 | 5.5 | 4.5 | 3.0 | 3.5 | .0 | .0 | .0 |
| 3 | 16.0 | 15.0 | 15.5 | 6.0 | 4.5 | 5.5 | 4.0 | 1.0 | 2.5 | .0 | .0 | .0 |
| 4 | 15.0 | 14.5 | 15.0 | 6.0 | 4.5 | 5.5 | 1.0 | .0 | .5 | .0 | .0 | .0 |
| 5 | 14.5 | 13.5 | 14.0 | 7.0 | 5.5 | 6.0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 6 | 14.0 | 13.0 | 13.5 | 6.0 | 4.5 | 5.5 | 1.0 | .0 | .0 | .0 | .0 | .0 |
| 7 | 14.0 | 12.5 | 13.5 | 8.0 | 5.0 | 6.0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 8 | 14.0 | 12.5 | 13.5 | 7.5 | 6.5 | 7.0 | 1.5 | .0 | .5 | .0 | .0 | .0 |
| 9 | 14.0 | 13.0 | 13.5 | 6.5 | 5.5 | 6.0 | 2.0 | 1.5 | 2.0 | .0 | .0 | .0 |
| 10 | 13.5 | 12.0 | 13.0 | 6.0 | 4.5 | 5.5 | 2.0 | 1.0 | 1.5 | .0 | .0 | .0 |
| 11 | 13.5 | 12.5 | 13.0 | 4.5 | 3.0 | 4.0 | 1.0 | .0 | .5 | .0 | .0 | .0 |
| 12 | 13.0 | 12.0 | 12.5 | 3.5 | 2.5 | 3.0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 13 | 12.0 | 11.0 | 11.5 | 4.0 | 2.5 | 3.0 | .5 | .0 | .0 | .0 | .0 | .0 |
| 14 | 11.0 | 10.5 | 10.5 | 4.0 | 3.0 | 3.5 | .5 | .0 | .0 | .0 | .0 | .0 |
| 15 | 11.0 | 10.0 | 10.5 | 5.0 | 4.0 | 4.0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 16 | 11.5 | 10.0 | 11.0 | 5.0 | 3.5 | 4.0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 17 | 13.0 | 11.0 | 12.0 | 3.5 | 1.5 | 3.0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 18 | 13.5 | 13.0 | 13.0 | 1.5 | 1.0 | 1.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 19 | 14.0 | 13.0 | 13.5 | 2.5 | 1.0 | 1.5 | .5 | .0 | .0 | .0 | .0 | .0 |
| 20 | 13.5 | 12.5 | 13.0 | 2.5 | 1.0 | 1.5 | .5 | .0 | .0 | .0 | .0 | .0 |
| 21 | 12.5 | 11.5 | 12.0 | 2.0 | .5 | 1.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 22 | 11.5 | 10.0 | 11.0 | 2.5 | 1.5 | 2.0 | .5 | .0 | .0 | .0 | .0 | .0 |
| 23 | 10.0 | 9.0 | 9.5 | 2.5 | 1.5 | 2.0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 24 | 9.0 | 8.0 | 8.5 | 2.5 | 2.0 | 2.5 | .5 | .0 | .0 | .0 | .0 | .0 |
| 25 | 8.5 | 8.0 | 8.5 | 3.0 | 2.5 | 3.0 | .5 | .0 | .0 | .0 | .0 | .0 |
| 26 | 8.5 | 7.5 | 8.0 | 3.0 | 2.0 | 2.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 27 | 7.5 | 6.5 | 7.5 | 2.0 | 1.5 | 2.0 | .0 | .0 | .0 | .5 | .0 | .0 |
| 28 | 7.5 | 7.0 | 7.5 | 2.0 | 1.5 | 2.0 | .0 | .0 | .0 | .5 | .0 | .0 |
| 29 | 7.5 | 6.5 | 7.0 | 2.5 | 2.0 | 2.0 | .0 | .0 | .0 | .5 | .0 | .0 |
| 30 | 6.5 | 5.5 | 6.0 | 2.5 | 1.5 | 2.0 | .0 | .0 | .0 | .5 | .0 | .0 |
| 31 | 6.0 | 5.0 | 5.5 | --- | --- | --- | .0 | .0 | .0 | .5 | .0 | .0 |
| MONTH | 17.0 | 5.0 | 11.5 | 8.0 | .5 | 3.5 | 4.5 | .0 | .5 | .5 | .0 | .0 |

## 01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

### TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | .5 | .0 | .0 | --- | --- | --- | 11.5 | 9.0 | 10.5 | 13.0 | 11.5 | 12.5 |
| 2 | .5 | .0 | .0 | --- | --- | --- | 11.5 | 9.5 | 10.5 | 12.5 | 12.0 | 12.0 |
| 3 | .5 | .0 | .5 | --- | --- | --- | 11.5 | 9.0 | 10.5 | 14.5 | 12.0 | 13.0 |
| 4 | .5 | .0 | .0 | --- | --- | --- | 12.0 | 10.5 | 11.0 | 15.0 | 13.0 | 14.0 |
| 5 | .5 | .0 | .5 | --- | --- | --- | 12.5 | 11.5 | 12.0 | 17.5 | 14.5 | 16.0 |
| 6 | .5 | .0 | .5 | --- | --- | --- | 12.0 | 9.5 | 11.0 | 17.0 | 15.5 | 16.5 |
| 7 | .5 | .0 | .0 | --- | --- | --- | 10.5 | 8.0 | 9.5 | 16.0 | 13.5 | 14.5 |
| 8 | .5 | .0 | .5 | --- | --- | --- | 12.0 | 9.0 | 10.5 | 16.0 | 13.0 | 14.5 |
| 9 | .5 | .0 | .5 | --- | --- | --- | 11.5 | 10.5 | 11.0 | 16.5 | 13.0 | 15.0 |
| 10 | .5 | .0 | .5 | --- | --- | --- | 13.0 | 9.5 | 11.5 | 17.0 | 14.5 | 16.0 |
| 11 | 1.0 | .0 | .5 | --- | --- | --- | 12.5 | 11.0 | 12.0 | 17.0 | 16.0 | 16.5 |
| 12 | .5 | .5 | .5 | --- | --- | --- | 12.5 | 11.5 | 12.0 | --- | --- | --- |
| 13 | .5 | .5 | .5 | --- | --- | --- | 13.0 | 11.0 | 12.0 | --- | --- | --- |
| 14 | .5 | .5 | .5 | --- | --- | --- | 12.0 | 10.0 | 11.0 | --- | --- | --- |
| 15 | 1.0 | .5 | .5 | --- | --- | --- | 10.0 | 8.0 | 9.0 | 14.5 | 13.5 | 14.0 |
| 16 | 1.5 | .5 | 1.0 | --- | --- | --- | 10.5 | 8.0 | 9.0 | 14.5 | 14.0 | 14.0 |
| 17 | 3.0 | 1.5 | 2.0 | --- | --- | --- | 10.0 | 9.5 | 9.5 | 14.0 | 13.0 | 13.5 |
| 18 | --- | --- | --- | --- | --- | --- | 13.0 | 9.5 | 11.0 | 13.0 | 12.5 | 13.0 |
| 19 | --- | --- | --- | 1.5 | .0 | 1.0 | 13.0 | 10.5 | 12.0 | 13.0 | 12.0 | 12.5 |
| 20 | --- | --- | --- | 1.0 | .0 | .5 | 12.5 | 11.0 | 12.0 | 14.0 | 12.0 | 12.5 |
| 21 | --- | --- | --- | 2.0 | .0 | 1.0 | 11.0 | 9.0 | 10.0 | 15.0 | 12.5 | 13.5 |
| 22 | --- | --- | --- | 4.0 | 1.0 | 2.5 | 11.5 | 8.5 | 10.0 | 16.0 | 13.5 | 14.5 |
| 23 | --- | --- | --- | 5.0 | 2.5 | 4.0 | 11.0 | 10.0 | 10.0 | 15.5 | 14.0 | 14.5 |
| 24 | --- | --- | --- | 6.0 | 4.0 | 5.0 | 11.0 | 9.5 | 10.0 | 16.0 | 14.5 | 15.0 |
| 25 | --- | --- | --- | 6.0 | 4.5 | 5.0 | 10.5 | 9.0 | 9.5 | 20.0 | 15.0 | 16.5 |
| 26 | --- | --- | --- | 7.0 | 4.5 | 6.0 | 11.0 | 8.5 | 9.5 | 19.5 | 16.5 | 17.5 |
| 27 | --- | --- | --- | 7.5 | 5.5 | 6.5 | 12.5 | 10.0 | 11.5 | 19.0 | 17.5 | 18.0 |
| 28 | --- | --- | --- | 8.5 | 5.0 | 7.0 | 13.0 | 11.5 | 12.0 | 20.0 | 17.5 | 18.5 |
| 29 | --- | --- | --- | 10.0 | 6.5 | 8.0 | 14.0 | 12.0 | 13.0 | 20.0 | 17.5 | 18.0 |
| 30 | --- | --- | --- | 10.5 | 9.0 | 9.5 | 14.0 | 13.0 | 13.5 | 19.5 | 17.0 | 18.0 |
| 31 | --- | --- | --- | 11.5 | 9.0 | 10.5 | --- | --- | --- | 19.0 | 17.5 | 18.0 |
| MONTH | 3.0 | .0 | .5 | 11.5 | .0 | 5.0 | 14.0 | 8.0 | 11.0 | 20.0 | 11.5 | 15.0 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 21.0 | 17.0 | 18.5 | 23.5 | 21.5 | 23.0 | 25.5 | 22.5 | 24.5 | 21.5 | 20.5 | 21.0 |
| 2 | 20.5 | 17.0 | 17.5 | 24.0 | 21.5 | 22.5 | 25.5 | 23.5 | 24.5 | 21.5 | 20.5 | 21.0 |
| 3 | 18.0 | 16.0 | 16.5 | 25.5 | 22.0 | 23.5 | 26.0 | 24.0 | 25.0 | 21.0 | 20.5 | 20.5 |
| 4 | 22.0 | 15.5 | 17.5 | 23.0 | 21.0 | 22.5 | 26.0 | 24.0 | 25.0 | 20.5 | 19.5 | 20.0 |
| 5 | 20.5 | 18.5 | 19.5 | 24.0 | 20.5 | 22.5 | 25.5 | 24.0 | 25.0 | 20.5 | 19.0 | 20.0 |
| 6 | 21.0 | 19.5 | 20.5 | 25.5 | 22.5 | 24.0 | 25.0 | 23.0 | 24.0 | 20.5 | 19.5 | 20.0 |
| 7 | 21.0 | 19.0 | 20.0 | 27.5 | 24.0 | 26.0 | 25.5 | 23.0 | 24.5 | 20.5 | 19.5 | 20.0 |
| 8 | 22.5 | 18.0 | 20.5 | 28.0 | 24.5 | 26.5 | 25.0 | 23.0 | 23.5 | 20.0 | 19.5 | 20.0 |
| 9 | 23.0 | 20.0 | 21.0 | 27.5 | 25.5 | 27.0 | 25.5 | 23.0 | 24.0 | 20.0 | 18.5 | 19.0 |
| 10 | 21.5 | 19.5 | 20.5 | 28.5 | 25.5 | 27.0 | 26.0 | 23.0 | 24.5 | 20.0 | 17.5 | 19.0 |
| 11 | 22.5 | 19.0 | 20.5 | 29.5 | 24.5 | 27.0 | 26.0 | 24.0 | 25.0 | 21.0 | 18.0 | 19.5 |
| 12 | 22.5 | 19.5 | 21.0 | 28.0 | 23.5 | 26.0 | 25.5 | 24.0 | 24.5 | 22.5 | 20.0 | 21.0 |
| 13 | 24.5 | 20.0 | 22.0 | 30.0 | 24.0 | 27.5 | 25.0 | 23.0 | 24.0 | 22.0 | 20.0 | 21.5 |
| 14 | 21.5 | 19.0 | 20.5 | 28.5 | 22.5 | 26.0 | 25.5 | 23.0 | 24.5 | 22.5 | 21.0 | 22.0 |
| 15 | 23.0 | 20.0 | 21.5 | 29.0 | 20.0 | 24.5 | 25.0 | 24.0 | 24.5 | 22.5 | 21.0 | 21.5 |
| 16 | 24.5 | 21.5 | 22.5 | 27.0 | 22.5 | 25.0 | 25.0 | 23.0 | 24.0 | 21.0 | 20.0 | 20.5 |
| 17 | 23.5 | 22.5 | 23.0 | 28.0 | 22.0 | 25.5 | 23.0 | 21.0 | 22.0 | 20.0 | 19.0 | 19.0 |
| 18 | 24.5 | 21.5 | 23.0 | 27.0 | 24.0 | 25.5 | 23.0 | 20.0 | 21.5 | 19.5 | 18.5 | 19.0 |
| 19 | 25.0 | 21.5 | 23.0 | 26.5 | 24.0 | 25.5 | 23.0 | 20.5 | 22.0 | 18.5 | 18.0 | 18.5 |
| 20 | 23.5 | 21.0 | 22.0 | 25.5 | 23.5 | 24.5 | 23.0 | 20.5 | 22.0 | 18.5 | 17.0 | 17.5 |
| 21 | 23.0 | 20.5 | 21.5 | 27.0 | 24.0 | 25.0 | 23.0 | 20.5 | 22.0 | 18.0 | 16.0 | 17.0 |
| 22 | 24.0 | 21.5 | 22.5 | 26.0 | 23.5 | 24.5 | 23.0 | 21.5 | 22.0 | 18.0 | 17.0 | 17.5 |
| 23 | 22.5 | 21.5 | 22.0 | 26.5 | 21.5 | 24.0 | 22.5 | 20.0 | 21.5 | 17.5 | 15.5 | 16.5 |
| 24 | 23.5 | 20.5 | 22.0 | 27.5 | 21.5 | 24.0 | 22.0 | 20.5 | 21.5 | 15.5 | 13.5 | 14.5 |
| 25 | 22.5 | 21.5 | 22.0 | 25.5 | 23.0 | 24.0 | 21.5 | 20.0 | 21.0 | 15.5 | 13.0 | 14.5 |
| 26 | 22.0 | 19.5 | 20.5 | 24.0 | 22.5 | 23.0 | 22.5 | 20.5 | 21.5 | 16.0 | 15.0 | 15.5 |
| 27 | 22.5 | 18.5 | 20.5 | 26.0 | 23.0 | 24.5 | 22.5 | 21.0 | 22.0 | 17.0 | 15.5 | 16.5 |
| 28 | 22.5 | 19.0 | 21.0 | 24.5 | 22.5 | 23.5 | 22.5 | 22.0 | 22.0 | 17.0 | 15.5 | 16.5 |
| 29 | 24.0 | 20.5 | 22.5 | 25.5 | 22.0 | 23.0 | 22.0 | 20.5 | 21.0 | 15.5 | 14.0 | 15.0 |
| 30 | 26.0 | 22.0 | 23.5 | 23.5 | 20.5 | 22.0 | 22.0 | 20.0 | 21.0 | 15.0 | 13.5 | 14.0 |
| 31 | --- | --- | --- | 24.5 | 21.0 | 23.0 | 21.5 | 21.0 | 21.0 | --- | --- | --- |
| MONTH | 26.0 | 15.5 | 21.0 | 30.0 | 20.0 | 24.5 | 26.0 | 20.0 | 23.0 | 22.5 | 13.0 | 18.5 |

## 01435000 NEVERSINK RIVER NEAR CLARYVILLE, NY

LOCATION.--Lat 41°53'24", long 74°35'25", Sullivan County, Hydrologic Unit 02040104, on left bank 50 ft (15 m) downstream from covered bridge, 300 ft (91 m) upstream from small tributary, 2.2 mi (3.5 km) downstream from confluence of East and West Branches, and 2.2 mi (3.5 km) southwest of Claryville.

DRAINAGE AREA.--65.6 $mi^2$ (170 $km^2$).

PERIOD OF RECORD.--July 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,522.37 ft (464.018 m) National Geodetic Vertical Datum of 1929. Prior to October 1, 1974, at datum 6.00 ft (1.829 m) higher. Oct. 1, 1974 to Sept. 30, 1979 at datum 5.00 ft (1.524 m) higher.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--30 years, 190 $ft^3/s$ (5.381 $m^3/s$), 39.33 in/yr (999 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,600 $ft^3/s$ (442 $m^3/s$) Mar. 21, 1980, maximum gage height, 13.83 ft (4.215 m) present datum, July 10, 1952; minimum discharge, 6.8 $ft^3/s$ (0.19 $m^3/s$) Sept. 24, 25, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Nov. 25, 1950, reached a stage of about 15.0 ft (4.57 m) present datum, from floodmarks, discharge, 23,400 $ft^3/s$ (663 $m^3/s$) by slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 $ft^3/s$ (85 $m^3/s$) and maximum (*):

| Date | Time | Discharge ($ft^3/s$) | Discharge ($m^3/s$) | Gage height (ft) | Gage height (m) | Date | Time | Discharge ($ft^3/s$) | Discharge ($m^3/s$) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 11 | 2145 | 4,360 | 123 | 9.76 | 2.975 | May 12 | 0445 | 7,530 | 213 | 10.85 | 3.307 |
| Feb. 20 | 1545 | *14,400 | 408 | *12.44 | 3.792 | | | | | | |

Minimum discharge, 11 $ft^3/s$ (0.31 $m^3/s$) Oct. 11, gage height, 4.79 ft (1.460 m).

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13 | 28 | 101 | 52 | 38 | 241 | 109 | 154 | 109 | 48 | 43 | 32 |
| 2 | 13 | 27 | 98 | 50 | 800 | 210 | 249 | 141 | 102 | 77 | 40 | 31 |
| 3 | 14 | 26 | 136 | 50 | 438 | 180 | 159 | 134 | 105 | 128 | 39 | 30 |
| 4 | 19 | 25 | 80 | 50 | 170 | 163 | 134 | 128 | 115 | 100 | 49 | 28 |
| 5 | 18 | 25 | 76 | 50 | 120 | 159 | 166 | 126 | 96 | 185 | 41 | 26 |
| 6 | 15 | 24 | 80 | 50 | 120 | 143 | 227 | 122 | 90 | 118 | 40 | 26 |
| 7 | 14 | 25 | 87 | 50 | 110 | 137 | 166 | 116 | 82 | 85 | 37 | 29 |
| 8 | 13 | 27 | 89 | 49 | 110 | 130 | 152 | 111 | 77 | 70 | 38 | 98 |
| 9 | 13 | 29 | 102 | 49 | 100 | 122 | 154 | 107 | 85 | 64 | 40 | 325 |
| 10 | 12 | 38 | 97 | 49 | 97 | 118 | 175 | 105 | 83 | 59 | 37 | 86 |
| 11 | 14 | 34 | 76 | 48 | 1610 | 115 | 152 | 809 | 74 | 55 | 35 | 59 |
| 12 | 15 | 31 | 74 | 47 | 1310 | 109 | 143 | 4060 | 70 | 52 | 37 | 47 |
| 13 | 15 | 29 | 72 | 46 | 443 | 107 | 134 | 1080 | 73 | 50 | 35 | 42 |
| 14 | 14 | 29 | 68 | 45 | 332 | 102 | 194 | 538 | 102 | 46 | 33 | 38 |
| 15 | 14 | 30 | 66 | 45 | 270 | 98 | 227 | 520 | 141 | 46 | 33 | 43 |
| 16 | 13 | 30 | 64 | 45 | 232 | 98 | 173 | 986 | 98 | 42 | 60 | 44 |
| 17 | 13 | 28 | 64 | 44 | 245 | 82 | 166 | 485 | 77 | 41 | 41 | 44 |
| 18 | 15 | 32 | 64 | 44 | 396 | 80 | 163 | 361 | 68 | 40 | 34 | 42 |
| 19 | 20 | 32 | 62 | 44 | 661 | 78 | 147 | 295 | 64 | 40 | 32 | 40 |
| 20 | 20 | 29 | 60 | 44 | 6090 | 78 | 141 | 252 | 61 | 82 | 31 | 39 |
| 21 | 19 | 30 | 60 | 43 | 2200 | 80 | 130 | 217 | 64 | 120 | 29 | 37 |
| 22 | 17 | 31 | 60 | 42 | 1200 | 79 | 126 | 194 | 78 | 67 | 28 | 38 |
| 23 | 15 | 31 | 58 | 41 | 682 | 77 | 143 | 173 | 83 | 51 | 28 | 48 |
| 24 | 15 | 162 | 58 | 40 | 1470 | 77 | 191 | 159 | 67 | 46 | 29 | 55 |
| 25 | 66 | 350 | 56 | 40 | 634 | 76 | 152 | 147 | 64 | 42 | 30 | 59 |
| 26 | 263 | 151 | 56 | 40 | 430 | 73 | 137 | 139 | 63 | 43 | 27 | 48 |
| 27 | 73 | 101 | 54 | 39 | 334 | 76 | 130 | 130 | 59 | 80 | 26 | 44 |
| 28 | 50 | 117 | 54 | 39 | 283 | 74 | 126 | 124 | 55 | 55 | 26 | 49 |
| 29 | 41 | 179 | 54 | 38 | --- | 74 | 145 | 126 | 51 | 70 | 25 | 44 |
| 30 | 35 | 120 | 52 | 38 | --- | 88 | 188 | 120 | 50 | 63 | 26 | 41 |
| 31 | 30 | --- | 52 | 38 | --- | 137 | --- | 122 | --- | 49 | 31 | --- |
| TOTAL | 921 | 1850 | 2230 | 1389 | 20925 | 3461 | 4799 | 12281 | 2406 | 2114 | 1080 | 1612 |
| MEAN | 29.7 | 61.7 | 71.9 | 44.8 | 747 | 112 | 160 | 396 | 80.2 | 68.2 | 34.8 | 53.7 |
| MAX | 263 | 350 | 136 | 52 | 6090 | 241 | 249 | 4060 | 141 | 185 | 60 | 325 |
| MIN | 12 | 24 | 52 | 38 | 38 | 73 | 109 | 105 | 50 | 40 | 25 | 26 |

CAL YR 1980 TOTAL 49434 MEAN 135 MAX 4560 MIN 12
WTR YR 1981 TOTAL 55068 MEAN 151 MAX 6090 MIN 12

## 01436000 NEVERSINK RIVER AT NEVERSINK, NY

LOCATION.--Lat 41°49'12", long 74°38'09", Sullivan County, Hydrologic Unit 02040104, on right bank at downstream end of outlet channel, 1,650 ft (503 m) downstream from Neversink Dam and State Highway 55, 1.7 mi (2.7 km) southwest of Neversink, and 2.6 mi (4.2 km) upstream from Wynkoop Brook.

DRAINAGE AREA.--91.9 mi² (238 km²).

PERIOD OF RECORD.--October 1941 to current year.

REVISED RECORDS.--WRD NY 1972: 1961 (M), 1968 (M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,255.24 ft (382.597 m) Board of Water Supply, City of New York datum. Prior to Jan. 17, 1953, water-stage recorder at site 650 ft (198 m) downstream at datum 0.20 ft (0.061 m) lower. Jan. 17, 1953 to Apr. 16, 1954, water-stage recorder at present site at datum 0.41 ft (0.125 m) higher.

REMARKS.--Records fair. Subsequent to June 1953, entire flow from 91.8 mi² (238 km²) of drainage area controlled by Neversink Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply (see Reservoirs in Delaware River Basin). Remainder of flow (except for conservation release and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,300 ft³/s (632 m³/s) Nov. 25, 1950, from rating curve extended above 2,600 ft³/s (73.6 m³/s) on basis of contracted-opening and critical-depth measurements of peak flow; maximum gage height, 11.65 ft (3.551 m) Sept. 27, 1942, site and datum then in use; no flow for all or part of each day Sept. 22-24, Oct. 26-29, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 91 ft³/s (2.58 m³/s) July 10, gage height, 3.45 ft (1.052 m); minimum, 4.1 ft³/s (0.116 m³/s) Dec. 3, Apr. 2, gage height, 2.44 ft (0.744 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 46 | 25 | 5.4 | 24 | 27 | 5.7 | 5.1 | 16 | 16 | 18 | 43 | 47 |
| 2 | 46 | 24 | 5.4 | 24 | 16 | 5.7 | 4.8 | 16 | 15 | 18 | 43 | 47 |
| 3 | 46 | 24 | 5.1 | 24 | 5.9 | 5.7 | 4.9 | 17 | 15 | 30 | 43 | 46 |
| 4 | 46 | 24 | 5.2 | 24 | 5.5 | 5.8 | 4.9 | 16 | 15 | 49 | 43 | 45 |
| 5 | 46 | 25 | 5.1 | 24 | 5.3 | 5.8 | 5.0 | 17 | 15 | 38 | 43 | 46 |
| 6 | 45 | 25 | 5.2 | 25 | 5.3 | 5.7 | 4.8 | 16 | 15 | 20 | 43 | 46 |
| 7 | 45 | 25 | 5.2 | 27 | 5.3 | 5.7 | 9.5 | 16 | 15 | 29 | 43 | 46 |
| 8 | 45 | 25 | 5.2 | 25 | 5.3 | 5.7 | 15 | 16 | 15 | 49 | 45 | 47 |
| 9 | 44 | 25 | 5.2 | 25 | 5.5 | 5.7 | 16 | 16 | 15 | 55 | 45 | 47 |
| 10 | 45 | 24 | 5.2 | 25 | 5.5 | 5.7 | 15 | 16 | 15 | 81 | 44 | 46 |
| 11 | 45 | 23 | 5.1 | 25 | 6.4 | 5.7 | 15 | 17 | 15 | 91 | 45 | 44 |
| 12 | 45 | 24 | 5.2 | 25 | 5.8 | 5.6 | 15 | 18 | 25 | 75 | 45 | 46 |
| 13 | 44 | 25 | 5.1 | 25 | 5.8 | 5.2 | 15 | 16 | 43 | 54 | 45 | 46 |
| 14 | 44 | 25 | 5.1 | 25 | 5.8 | 4.8 | 16 | 16 | 34 | 61 | 45 | 46 |
| 15 | 43 | 24 | 5.2 | 25 | 5.7 | 5.4 | 15 | 16 | 15 | 49 | 45 | 46 |
| 16 | 43 | 24 | 5.2 | 25 | 5.8 | 4.9 | 16 | 16 | 15 | 46 | 44 | 46 |
| 17 | 43 | 26 | 5.0 | 25 | 5.7 | 4.9 | 16 | 16 | 15 | 54 | 44 | 46 |
| 18 | 44 | 26 | 11 | 25 | 5.8 | 4.8 | 15 | 16 | 15 | 66 | 44 | 46 |
| 19 | 44 | 25 | 24 | 25 | 5.8 | 4.8 | 15 | 16 | 24 | 66 | 44 | 46 |
| 20 | 43 | 26 | 24 | 25 | 7.5 | 4.8 | 15 | 16 | 33 | 42 | 46 | 46 |
| 21 | 43 | 26 | 24 | 25 | 6.6 | 4.8 | 15 | 16 | 16 | 17 | 46 | 46 |
| 22 | 44 | 26 | 24 | 25 | 6.6 | 4.8 | 16 | 16 | 16 | 17 | 46 | 46 |
| 23 | 45 | 25 | 24 | 25 | 6.2 | 4.8 | 16 | 16 | 16 | 27 | 46 | 45 |
| 24 | 30 | 16 | 24 | 26 | 6.1 | 4.8 | 16 | 16 | 16 | 43 | 46 | 44 |
| 25 | 17 | 5.4 | 24 | 26 | 5.7 | 4.8 | 15 | 16 | 16 | 43 | 46 | 44 |
| 26 | 16 | 5.3 | 23 | 26 | 5.6 | 4.9 | 15 | 16 | 26 | 43 | 45 | 45 |
| 27 | 16 | 5.4 | 23 | 26 | 5.7 | 4.9 | 15 | 16 | 46 | 42 | 45 | 45 |
| 28 | 16 | 5.5 | 23 | 26 | 5.8 | 4.8 | 16 | 16 | 37 | 41 | 45 | 45 |
| 29 | 24 | 5.4 | 24 | 27 | --- | 4.9 | 16 | 16 | 16 | 41 | 45 | 44 |
| 30 | 39 | 5.3 | 25 | 27 | --- | 5.0 | 16 | 16 | 17 | 41 | 45 | 44 |
| 31 | 26 | --- | 24 | 27 | --- | 4.9 | --- | 16 | --- | 41 | 46 | --- |
| TOTAL | 1208 | 619.3 | 409.1 | 783 | 195.0 | 161.5 | 394.0 | 501 | 607 | 1387 | 1383 | 1369 |
| MEAN | 39.0 | 20.6 | 13.2 | 25.3 | 6.96 | 5.21 | 13.1 | 16.2 | 20.2 | 44.7 | 44.6 | 45.6 |
| MAX | 46 | 26 | 25 | 27 | 27 | 5.8 | 16 | 18 | 46 | 91 | 46 | 47 |
| MIN | 16 | 5.3 | 5.0 | 24 | 5.3 | 4.8 | 4.8 | 16 | 15 | 17 | 43 | 44 |

CAL YR 1980 TOTAL 13528.4 MEAN 37.0 MAX 213 MIN 5.0
WTR YR 1981 TOTAL 9016.9 MEAN 24.7 MAX 91 MIN 4.8

## 01436500 NEVERSINK RIVER AT WOODBOURNE, NY

LOCATION.--Lat 41°45'24", long 74°35'52", Sullivan County, Hydrologic Unit 02040104, on left bank 0.2 mi (0.3 km) downstream from highway bridge at Woodbourne, 0.3 mi (0.5 km) upstream from outlet of South Wind Lake. Water-quality sampling site at discharge station.

DRAINAGE AREA.--113 mi² (293 km²).

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1937 to September 1972, October 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,180 ft (360 m), from topographic map. Prior to Sept. 20, 1938, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor. Subsequent to June 1953, entire flow from 91.8 mi² (238 km²) of drainage area controlled by Neversink Reservoir. Part of flow diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,000 ft³/s (623 m³/s) Nov. 26, 1950, gage height, 11.19 ft (3.411 m); maximum gage height, 11.2 ft (3.414 m) July 22, 1938, from floodmarks and graph based on gage readings; minimum discharge, 6.7 ft³/s (0.19 m³/s) June 27, 1953; minimum daily, 8.2 ft³/s (0.23 m³/s) June 25, 1953; minimum gage height, 0.80 ft (0.244 m) Aug. 25, 27, 28, 1949.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,560 ft³/s (44.2 m³/s) Feb. 20, gage height 4.57 ft (1.393 m); minimum, 15 ft³/s (.425 m³/s) Mar. 17, gage height 1.12 ft (.341 m); minimum daily discharge 18 ft³/s (.510 m³/s) Dec. 13-17, Mar. 27-29.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 48 | 30 | 25 | 35 | 29 | 61 | 20 | 62 | 32 | 20 | 46 | 46 |
| 2 | 48 | 28 | 26 | 35 | 200 | 52 | 43 | 53 | 30 | 29 | 46 | 46 |
| 3 | 49 | 28 | 33 | 35 | 300 | 46 | 39 | 49 | 33 | 25 | 48 | 45 |
| 4 | 51 | 28 | 53 | 34 | 250 | 43 | 25 | 45 | 39 | 51 | 49 | 42 |
| 5 | 48 | 28 | 25 | 34 | 220 | 40 | 23 | 42 | 30 | 99 | 48 | 43 |
| 6 | 48 | 28 | 21 | 34 | 190 | 40 | 30 | 40 | 27 | 42 | 48 | 45 |
| 7 | 48 | 29 | 20 | 34 | 170 | 36 | 26 | 39 | 26 | 30 | 46 | 45 |
| 8 | 48 | 29 | 20 | 33 | 150 | 33 | 29 | 36 | 24 | 51 | 48 | 55 |
| 9 | 46 | 32 | 21 | 33 | 140 | 32 | 34 | 34 | 26 | 52 | 46 | 65 |
| 10 | 48 | 33 | 23 | 33 | 130 | 29 | 43 | 33 | 25 | 70 | 46 | 49 |
| 11 | 49 | 30 | 21 | 33 | 200 | 28 | 34 | 139 | 24 | 83 | 46 | 43 |
| 12 | 48 | 29 | 21 | 33 | 587 | 28 | 33 | 756 | 24 | 76 | 48 | 45 |
| 13 | 48 | 29 | 18 | 33 | 398 | 27 | 34 | 248 | 52 | 52 | 46 | 45 |
| 14 | 48 | 28 | 18 | 32 | 350 | 26 | 71 | 135 | 68 | 64 | 45 | 45 |
| 15 | 46 | 28 | 18 | 32 | 280 | 27 | 70 | 172 | 43 | 49 | 46 | 46 |
| 16 | 46 | 27 | 18 | 32 | 230 | 24 | 55 | 332 | 33 | 48 | 48 | 48 |
| 17 | 46 | 29 | 18 | 31 | 200 | 24 | 51 | 135 | 26 | 49 | 45 | 46 |
| 18 | 48 | 49 | 20 | 31 | 180 | 24 | 48 | 95 | 23 | 65 | 45 | 46 |
| 19 | 48 | 29 | 25 | 30 | 240 | 23 | 40 | 79 | 23 | 65 | 43 | 46 |
| 20 | 48 | 28 | 40 | 30 | 863 | 22 | 39 | 70 | 48 | 76 | 43 | 46 |
| 21 | 48 | 29 | 40 | 30 | 356 | 21 | 36 | 62 | 27 | 40 | 43 | 45 |
| 22 | 48 | 30 | 39 | 30 | 174 | 19 | 34 | 56 | 39 | 27 | 43 | 46 |
| 23 | 49 | 30 | 39 | 30 | 128 | 19 | 48 | 51 | 36 | 23 | 43 | 48 |
| 24 | 42 | 67 | 39 | 30 | 306 | 19 | 76 | 48 | 26 | 45 | 43 | 46 |
| 25 | 46 | 75 | 38 | 30 | 135 | 19 | 52 | 45 | 26 | 46 | 43 | 46 |
| 26 | 64 | 42 | 38 | 29 | 97 | 19 | 45 | 42 | 27 | 46 | 43 | 46 |
| 27 | 32 | 29 | 38 | 29 | 76 | 18 | 42 | 42 | 51 | 44 | 43 | 46 |
| 28 | 26 | 32 | 37 | 29 | 67 | 18 | 40 | 39 | 49 | 46 | 43 | 48 |
| 29 | 25 | 39 | 37 | 29 | --- | 18 | 85 | 39 | 22 | 51 | 43 | 45 |
| 30 | 49 | 28 | 36 | 29 | --- | 19 | 93 | 37 | 19 | 48 | 43 | 45 |
| 31 | 32 | --- | 35 | 29 | --- | 23 | --- | 34 | --- | 46 | 45 | --- |
| TOTAL | 1418 | 1000 | 900 | 981 | 6646 | 877 | 1338 | 3089 | 978 | 1558 | 1401 | 1398 |
| MEAN | 45.7 | 33.3 | 29.0 | 31.6 | 237 | 28.3 | 44.6 | 99.6 | 32.6 | 50.3 | 45.2 | 46.6 |
| MAX | 64 | 75 | 53 | 35 | 863 | 61 | 93 | 756 | 68 | 99 | 49 | 65 |
| MIN | 25 | 27 | 18 | 29 | 29 | 18 | 20 | 33 | 19 | 20 | 43 | 42 |

CAL YR 1980 TOTAL 22219 MEAN 60.7 MAX 794 MIN 18
WTR YR 1981 TOTAL 21584 MEAN 59.1 MAX 863 MIN 18

## 01436500 NEVERSINK RIVER AT WOODBOURNE, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964, 1965, 1972, 1978 to current year.
CHEMICAL DATA: 1964 (b), 1965 (c), 1972 (a).
NUTRIENT DATA: 1964 (b), 1965 (c), 1972 (a).

PERIOD OF DAILY RECORD.—
WATER TEMPERATURES: July and August, 1978, May 1979 to current year.

INSTRUMENTATION.--Temperature recorder since October 1977.

REMARKS.--No record May 15 to June 2, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.—
WATER TEMPERATURES: Maximum (water years 1979-81), 26.5°C June 16, 1981; minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.—
WATER TEMPERATURES: Maximum, 26.5°C June 16; minimum, freezing point Feb. 2-19.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 15.5 | 11.0 | 13.0 | 7.5 | 5.5 | 6.5 | 5.0 | 2.5 | 3.5 | .5 | .5 | .5 |
| 2 | 13.5 | 12.0 | 12.5 | 6.5 | 5.0 | 6.0 | 5.5 | 3.5 | 4.5 | .5 | .5 | .5 |
| 3 | 12.5 | 11.5 | 12.0 | 7.0 | 4.5 | 5.5 | 4.5 | 1.0 | 2.5 | .5 | .5 | .5 |
| 4 | 14.5 | 11.5 | 12.5 | 6.5 | 5.5 | 6.0 | 1.0 | .5 | 1.0 | .5 | .5 | .5 |
| 5 | 14.0 | 9.5 | 11.0 | 7.5 | 5.5 | 6.5 | 1.5 | .5 | 1.0 | .5 | .5 | .5 |
| 6 | 13.5 | 9.0 | 11.0 | 6.5 | 4.5 | 5.5 | 1.5 | 1.0 | 1.0 | .5 | .5 | .5 |
| 7 | 12.5 | 10.0 | 11.5 | 9.0 | 5.0 | 6.5 | 1.0 | 1.0 | 1.0 | .5 | .5 | .5 |
| 8 | 14.0 | 9.5 | 11.5 | 10.0 | 7.0 | 8.5 | 1.5 | 1.0 | 1.0 | .5 | .5 | .5 |
| 9 | 14.5 | 10.5 | 11.5 | 6.5 | 5.5 | 5.5 | 3.0 | 1.5 | 2.5 | .5 | .5 | .5 |
| 10 | 11.5 | 8.0 | 9.5 | 5.5 | 4.0 | 5.5 | 3.0 | 2.5 | 3.0 | .5 | .5 | .5 |
| 11 | 12.5 | 10.5 | 11.0 | 4.0 | 2.5 | 3.5 | 2.5 | .5 | 1.5 | .5 | .5 | .5 |
| 12 | 10.5 | 9.0 | 9.5 | 4.0 | 1.5 | 2.5 | 1.0 | .5 | 1.0 | .5 | .5 | .5 |
| 13 | 10.0 | 8.0 | 8.5 | 5.5 | 2.0 | 3.5 | 2.0 | 1.0 | 1.5 | .5 | .5 | .5 |
| 14 | 11.0 | 7.0 | 8.5 | 6.5 | 4.0 | 5.0 | 1.0 | 1.0 | 1.0 | .5 | .5 | .5 |
| 15 | 9.5 | 8.5 | 9.0 | 6.5 | 4.5 | 5.0 | 1.0 | 1.0 | 1.0 | .5 | .5 | .5 |
| 16 | 11.0 | 8.0 | 9.5 | 5.5 | 2.0 | 4.0 | 1.0 | .5 | .5 | .5 | .5 | .5 |
| 17 | 14.0 | 9.5 | 11.5 | 2.5 | .5 | 1.5 | .5 | .5 | .5 | .5 | .5 | .5 |
| 18 | 13.5 | 12.0 | 13.0 | .5 | .5 | .5 | .5 | .5 | .5 | .5 | .5 | .5 |
| 19 | 14.0 | 10.5 | 12.0 | 2.5 | .5 | 1.0 | .5 | .5 | .5 | .5 | .5 | .5 |
| 20 | 11.5 | 9.5 | 10.5 | 3.5 | 1.5 | 2.0 | .5 | .5 | .5 | .5 | .5 | .5 |
| 21 | 10.5 | 9.0 | 9.5 | 3.0 | 1.0 | 2.0 | .5 | .5 | .5 | .5 | .5 | .5 |
| 22 | 9.0 | 7.5 | 8.0 | 5.0 | 2.0 | 3.0 | .5 | .5 | .5 | .5 | .5 | .5 |
| 23 | 10.5 | 7.0 | 8.0 | 3.5 | 1.5 | 2.5 | .5 | .5 | .5 | .5 | .5 | .5 |
| 24 | 9.0 | 6.0 | 7.5 | 4.0 | 3.0 | 3.5 | .5 | .5 | .5 | .5 | .5 | .5 |
| 25 | 9.0 | 8.0 | 8.0 | 4.0 | 3.0 | 3.5 | .5 | .5 | .5 | .5 | .5 | .5 |
| 26 | 8.5 | 6.5 | 7.5 | 3.5 | 1.5 | 2.5 | .5 | .5 | .5 | .5 | .5 | .5 |
| 27 | 9.0 | 5.5 | 7.0 | 2.0 | 1.5 | 2.0 | .5 | .5 | .5 | .5 | .5 | .5 |
| 28 | 8.0 | 6.5 | 7.0 | 2.5 | 1.5 | 2.0 | .5 | .5 | .5 | .5 | .5 | .5 |
| 29 | 6.5 | 5.5 | 6.0 | 3.5 | 2.5 | 2.5 | .5 | .5 | .5 | .5 | .5 | .5 |
| 30 | 6.5 | 5.0 | 6.0 | 4.0 | 2.5 | 3.0 | .5 | .5 | .5 | .5 | .5 | .5 |
| 31 | 8.5 | 5.0 | 6.5 | --- | --- | --- | .5 | .5 | .5 | .5 | .5 | .5 |
| MONTH | 15.5 | 5.0 | 9.5 | 10.0 | .5 | 4.0 | 5.5 | .5 | 1.0 | .5 | .5 | .5 |

## 01436500 NEVERSINK RIVER AT WOODBOURNE, NY--Continued

### TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | .5 | .5 | .5 | 4.0 | 2.5 | 3.0 | 12.0 | 6.5 | 9.5 | 12.5 | 8.0 | 11.0 |
| 2 | .5 | .0 | .0 | 3.5 | 2.0 | 3.0 | 12.5 | 7.5 | 9.5 | 11.0 | 9.5 | 10.0 |
| 3 | .0 | .0 | .0 | 4.0 | .5 | 1.5 | 14.0 | 5.5 | 9.5 | 16.5 | 7.5 | 11.5 |
| 4 | .0 | .0 | .0 | 2.0 | .5 | 1.0 | 13.0 | 10.0 | 11.0 | 18.0 | 9.5 | 14.0 |
| 5 | .0 | .0 | .0 | 1.5 | 1.0 | 1.5 | 12.0 | 9.5 | 11.0 | 20.0 | 13.5 | 16.5 |
| 6 | .0 | .0 | .0 | 5.0 | .5 | 2.0 | 9.5 | 5.5 | 8.0 | 16.0 | 11.5 | 14.5 |
| 7 | .0 | .0 | .0 | 3.5 | 1.0 | 2.5 | 13.0 | 4.0 | 8.0 | 16.5 | 8.5 | 12.0 |
| 8 | .0 | .0 | .0 | 4.0 | 2.5 | 3.5 | 15.0 | 6.5 | 10.5 | 17.5 | 9.5 | 13.5 |
| 9 | .0 | .0 | .0 | 6.0 | 3.0 | 4.0 | 11.0 | 8.5 | 10.0 | 17.5 | 10.0 | 13.5 |
| 10 | .0 | .0 | .0 | 5.5 | 3.0 | 4.0 | 14.0 | 6.0 | 10.0 | 16.5 | 11.5 | 14.0 |
| 11 | .0 | .0 | .0 | 5.5 | 2.5 | 4.0 | 11.0 | 8.5 | 10.0 | 14.5 | 12.0 | 13.5 |
| 12 | .0 | .0 | .0 | 6.5 | 2.5 | 4.0 | 13.5 | 9.5 | 11.0 | 12.5 | 11.5 | 12.0 |
| 13 | .0 | .0 | .0 | 6.5 | 3.0 | 4.5 | 15.0 | 8.5 | 11.0 | 14.5 | 9.5 | 12.0 |
| 14 | .0 | .0 | .0 | 5.0 | 1.0 | 2.5 | 10.0 | 6.0 | 8.0 | 16.5 | 9.5 | 13.0 |
| 15 | .0 | .0 | .0 | 6.5 | .5 | 3.0 | 10.5 | 4.5 | 7.0 | --- | --- | --- |
| 16 | .0 | .0 | .0 | 4.5 | 1.0 | 3.0 | 11.5 | 4.0 | 8.0 | --- | --- | --- |
| 17 | .0 | .0 | .0 | 4.0 | .5 | 1.5 | 8.5 | 7.0 | 8.0 | --- | --- | --- |
| 18 | .0 | .0 | .0 | 2.5 | .5 | 1.0 | 15.0 | 8.0 | 11.0 | --- | --- | --- |
| 19 | .5 | .0 | .5 | 1.5 | .5 | 1.0 | 12.5 | 7.5 | 10.0 | --- | --- | --- |
| 20 | 2.5 | .5 | 1.0 | 2.5 | .5 | 1.0 | 12.5 | 6.5 | 9.5 | --- | --- | --- |
| 21 | 4.5 | 2.5 | 3.5 | 2.0 | .5 | 1.0 | 11.0 | 4.0 | 7.0 | --- | --- | --- |
| 22 | 5.0 | 4.5 | 5.0 | 6.5 | .5 | 3.0 | 13.0 | 5.0 | 8.5 | --- | --- | --- |
| 23 | 4.5 | 4.5 | 4.5 | 10.0 | 2.0 | 5.0 | 9.5 | 6.5 | 7.5 | --- | --- | --- |
| 24 | 6.5 | 4.0 | 5.0 | 10.0 | 3.5 | 6.0 | 11.0 | 6.0 | 8.5 | --- | --- | --- |
| 25 | 4.0 | 3.0 | 3.5 | 7.0 | 4.0 | 5.0 | 9.0 | 7.0 | 7.5 | --- | --- | --- |
| 26 | 3.5 | 3.0 | 3.0 | 11.0 | 2.5 | 6.0 | 13.0 | 6.0 | 9.0 | --- | --- | --- |
| 27 | 6.0 | 2.0 | 3.5 | 8.5 | 5.0 | 6.5 | 14.0 | 8.5 | 11.0 | --- | --- | --- |
| 28 | 3.0 | 1.5 | 2.5 | 12.0 | 3.0 | 7.0 | 13.5 | 9.5 | 11.5 | --- | --- | --- |
| 29 | --- | --- | --- | 13.5 | 4.5 | 8.5 | 13.5 | 10.0 | 12.0 | --- | --- | --- |
| 30 | --- | --- | --- | 10.0 | 7.5 | 9.0 | 13.0 | 10.0 | 11.5 | --- | --- | --- |
| 31 | --- | --- | --- | 11.5 | 8.0 | 9.0 | --- | --- | --- | --- | --- | --- |
| MONTH | 6.5 | .0 | 1.0 | 13.5 | .5 | 4.0 | 15.0 | 4.0 | 9.5 | 20.0 | 7.5 | 13.0 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | --- | --- | --- | 22.5 | 18.5 | 20.0 | 19.5 | 14.5 | 17.0 | 16.0 | 13.5 | 14.5 |
| 2 | --- | --- | --- | 22.0 | 18.5 | 20.0 | 19.5 | 15.0 | 17.5 | 15.5 | 14.0 | 15.0 |
| 3 | 14.5 | 14.0 | 14.0 | 23.5 | 19.0 | 21.0 | 18.0 | 15.0 | 16.5 | 14.5 | 13.5 | 14.0 |
| 4 | 20.5 | 14.0 | 16.5 | 20.0 | 15.5 | 17.5 | 20.0 | 14.5 | 17.5 | 13.5 | 13.0 | 13.0 |
| 5 | 23.0 | 16.0 | 19.0 | 19.5 | 14.5 | 17.0 | 19.0 | 16.0 | 17.5 | 16.0 | 12.5 | 13.5 |
| 6 | 23.0 | 17.5 | 19.5 | 24.0 | 16.5 | 19.5 | 19.0 | 15.0 | 17.0 | 14.0 | 13.0 | 13.5 |
| 7 | 22.5 | 17.0 | 19.0 | 25.5 | 19.0 | 22.0 | 19.0 | 14.5 | 16.5 | 14.5 | 12.5 | 13.5 |
| 8 | 23.0 | 14.5 | 18.0 | 23.5 | 18.5 | 21.0 | 17.0 | 14.0 | 15.0 | 14.0 | 13.0 | 13.5 |
| 9 | 23.0 | 18.0 | 19.5 | 22.5 | 18.0 | 20.5 | 19.5 | 13.5 | 16.0 | 15.5 | 13.0 | 14.0 |
| 10 | 19.5 | 16.5 | 18.0 | 21.0 | 16.0 | 18.5 | 20.5 | 15.5 | 18.0 | 16.0 | 10.5 | 13.5 |
| 11 | 23.5 | 15.0 | 18.5 | 19.0 | 12.0 | 15.5 | 19.5 | 16.0 | 17.5 | 18.0 | 13.0 | 15.0 |
| 12 | 22.5 | 16.0 | 19.0 | 19.0 | 12.5 | 16.0 | 17.5 | 15.5 | 16.5 | 18.0 | 14.0 | 15.5 |
| 13 | 20.5 | 16.0 | 18.0 | 20.0 | 15.0 | 17.5 | 18.0 | 14.0 | 16.0 | 18.0 | 13.0 | 15.0 |
| 14 | 18.0 | 13.5 | 14.5 | 18.5 | 14.0 | 16.5 | 18.0 | 14.5 | 16.5 | 17.5 | 13.5 | 15.5 |
| 15 | 22.0 | 13.5 | 17.5 | 20.5 | 14.0 | 17.0 | 17.5 | 15.0 | 16.0 | 16.0 | 13.0 | 14.5 |
| 16 | 26.5 | 19.5 | 22.5 | 19.5 | 14.5 | 17.0 | 19.0 | 15.0 | 16.5 | 14.5 | 12.5 | 13.0 |
| 17 | 24.5 | 19.5 | 22.0 | 21.0 | 15.0 | 17.5 | 19.0 | 13.5 | 16.0 | 13.0 | 12.5 | 12.5 |
| 18 | 25.0 | 17.0 | 20.5 | 18.0 | 13.5 | 16.0 | 19.0 | 12.5 | 15.5 | 15.5 | 12.0 | 13.0 |
| 19 | 22.5 | 18.0 | 20.0 | 17.5 | 13.0 | 15.5 | 19.0 | 13.0 | 16.0 | 13.5 | 11.5 | 12.5 |
| 20 | 19.5 | 14.5 | 17.0 | 16.0 | 13.0 | 14.0 | 19.5 | 13.5 | 16.0 | 14.0 | 11.0 | 12.0 |
| 21 | 19.5 | 14.0 | 16.5 | 21.0 | 15.0 | 18.0 | 19.0 | 13.0 | 16.0 | 14.0 | 9.5 | 11.5 |
| 22 | 20.5 | 17.0 | 18.5 | 24.5 | 18.0 | 20.5 | 16.0 | 14.0 | 14.5 | 13.0 | 12.0 | 12.5 |
| 23 | 19.5 | 16.0 | 17.5 | 24.5 | 17.0 | 20.0 | 18.5 | 12.0 | 14.5 | 12.0 | 10.0 | 11.0 |
| 24 | 21.5 | 15.0 | 18.0 | 19.5 | 16.0 | 18.0 | 16.5 | 13.5 | 15.0 | 10.0 | 9.5 | 10.0 |
| 25 | 21.0 | 17.5 | 18.5 | 17.0 | 15.0 | 16.0 | 17.0 | 13.0 | 14.5 | 14.5 | 9.0 | 11.5 |
| 26 | 18.0 | 15.0 | 16.5 | 16.0 | 14.5 | 15.5 | 19.5 | 13.5 | 15.5 | 14.0 | 12.0 | 13.0 |
| 27 | 19.0 | 13.0 | 16.0 | 20.5 | 14.5 | 17.0 | 17.5 | 13.5 | 15.5 | 15.0 | 11.0 | 13.0 |
| 28 | 20.0 | 13.5 | 16.5 | 17.5 | 14.5 | 15.5 | 19.0 | 14.5 | 16.5 | 14.0 | 10.5 | 12.5 |
| 29 | 22.5 | 15.0 | 18.5 | 18.0 | 14.0 | 15.5 | 16.5 | 13.0 | 14.5 | 13.0 | 9.0 | 10.5 |
| 30 | 26.0 | 17.0 | 20.5 | 19.5 | 13.0 | 16.0 | 16.0 | 12.5 | 14.0 | 10.5 | 9.0 | 9.5 |
| 31 | --- | --- | --- | 20.5 | 14.0 | 17.0 | 15.5 | 14.0 | 15.0 | --- | --- | --- |
| MONTH | 26.5 | 13.0 | 18.0 | 25.5 | 12.0 | 17.5 | 20.5 | 12.0 | 16.0 | 18.0 | 9.0 | 13.0 |

## 01437500 NEVERSINK RIVER AT GODEFFROY, NY

LOCATION.—Lat 41°26'28", long 74°36'07", Orange County, Hydrologic Unit 02040104, on right bank just upstream from highway bridge on Graham Road, 0.5 mi (0.8 km) downstream from Basher Kill, 0.8 mi (1.3 km) southeast of Godeffroy, 1.7 mi (2.7 km) south of Cuddebackville, and 8.5 mi (13.7 km) upstream from mouth.

DRAINAGE AREA.—302 mi$^2$ (782 km$^2$).

PERIOD OF RECORD.—August to October 1903, August 1909 to April 1914 (gage heights and discharge measurements, also twice-daily figures of discharge for January 1911 to December 1912, which do not represent daily mean discharges because of diurnal fluctuation), and July 1937 to current year. August to October 1903, published as "Navesink River at Godeffroy, NY."

REVISED RECORDS.—WSP 821: Drainage area. WSP 1502: 1951(M).

GAGE.—Water-stage recorder. Datum of gage is 459.66 ft (140.104 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Apr. 30, 1914, nonrecording gages at same site (August to October 1903 at datum 0.98 ft or 0.299 m higher).

REMARKS.—Records fair except those for winter periods, which are poor. Prior to 1949, diurnal fluctuation at low and medium flow caused by powerplant at Cuddebackville. Subsequent to June 1953, entire flow from 91.8 mi$^2$ (237.8 km$^2$) of drainage area controlled by Neversink Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill), impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,000 ft$^3$/s (935 m$^3$/s) Aug. 19, 1955, gage height, 12.49 ft (3.087 m), from rating curve extended above 11,000 ft$^3$/s (312 m$^3$/s) on basis of slope-area measurement of peak flow; practically no flow several times in July 1911.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 5,420 ft$^3$/s (153 m$^3$/s) May 12, gage height 7.49 ft (2.283 m); minimum recorded discharge, 60 ft$^3$/s (1.70 m$^3$/s) Dec. 15, gage height, 2.77 ft (0.844 m), but may have been less during periods of ice effect (Dec. 18 to Feb. 12) or during periods of estimated record (Sept. 25-30).

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 71 | 110 | 208 | 92 | 62 | 769 | 158 | 400 | 220 | 172 | 131 | 86 |
| 2 | 74 | 102 | 192 | 90 | 150 | 657 | 217 | 373 | 204 | 261 | 128 | 86 |
| 3 | 80 | 97 | 193 | 86 | 500 | 576 | 217 | 346 | 208 | 216 | 128 | 84 |
| 4 | 91 | 92 | 146 | 80 | 400 | 501 | 187 | 318 | 257 | 204 | 125 | 80 |
| 5 | 84 | 90 | 133 | 82 | 320 | 484 | 181 | 298 | 232 | 441 | 128 | 75 |
| 6 | 79 | 88 | 145 | 80 | 260 | 444 | 207 | 288 | 201 | 384 | 125 | 73 |
| 7 | 81 | 85 | 152 | 80 | 220 | 414 | 189 | 268 | 183 | 275 | 122 | 73 |
| 8 | 80 | 88 | 152 | 80 | 190 | 382 | 169 | 249 | 162 | 232 | 131 | 98 |
| 9 | 74 | 92 | 147 | 78 | 170 | 361 | 171 | 234 | 159 | 224 | 140 | 373 |
| 10 | 74 | 105 | 154 | 78 | 160 | 336 | 222 | 225 | 159 | 208 | 131 | 159 |
| 11 | 89 | 100 | 144 | 76 | 200 | 316 | 216 | 386 | 146 | 212 | 125 | 111 |
| 12 | 94 | 92 | 110 | 72 | 1800 | 296 | 205 | 4360 | 134 | 208 | 137 | 89 |
| 13 | 87 | 85 | 144 | 70 | 991 | 280 | 205 | 2870 | 131 | 190 | 137 | 75 |
| 14 | 81 | 76 | 90 | 70 | 888 | 267 | 239 | 1820 | 197 | 159 | 128 | 78 |
| 15 | 79 | 92 | 81 | 68 | 749 | 241 | 432 | 1420 | 298 | 159 | 128 | 75 |
| 16 | 79 | 97 | 100 | 72 | 625 | 244 | 322 | 3010 | 293 | 143 | 140 | 86 |
| 17 | 76 | 92 | 105 | 74 | 602 | 226 | 296 | 1870 | 220 | 134 | 128 | 89 |
| 18 | 75 | 93 | 100 | 72 | 661 | 209 | 302 | 1330 | 172 | 131 | 119 | 82 |
| 19 | 78 | 112 | 94 | 70 | 717 | 204 | 278 | 1040 | 149 | 146 | 117 | 78 |
| 20 | 74 | 96 | 90 | 70 | 2490 | 194 | 255 | 862 | 162 | 208 | 114 | 80 |
| 21 | 71 | 113 | 90 | 68 | 3130 | 185 | 240 | 698 | 220 | 298 | 106 | 80 |
| 22 | 71 | 125 | 90 | 66 | 2090 | 190 | 226 | 595 | 302 | 220 | 106 | 75 |
| 23 | 72 | 107 | 92 | 64 | 1620 | 181 | 237 | 489 | 357 | 159 | 106 | 94 |
| 24 | 72 | 159 | 100 | 66 | 2310 | 177 | 351 | 417 | 270 | 137 | 103 | 82 |
| 25 | 134 | 459 | 94 | 66 | 1680 | 173 | 332 | 368 | 240 | 149 | 101 | 78 |
| 26 | 412 | 315 | 88 | 66 | 1310 | 165 | 287 | 337 | 240 | 152 | 96 | 76 |
| 27 | 208 | 238 | 86 | 64 | 1060 | 158 | 261 | 302 | 220 | 159 | 91 | 74 |
| 28 | 155 | 226 | 90 | 64 | 886 | 150 | 240 | 279 | 220 | 146 | 89 | 74 |
| 29 | 132 | 247 | 92 | 62 | --- | 143 | 289 | 279 | 201 | 159 | 89 | 72 |
| 30 | 118 | 232 | 100 | 62 | --- | 142 | 463 | 270 | 169 | 155 | 86 | 70 |
| 31 | 126 | --- | 98 | 62 | --- | 152 | --- | 244 | --- | 140 | 86 | --- |
| TOTAL | 3171 | 4105 | 3700 | 2250 | 26241 | 9217 | 7594 | 26245 | 6326 | 6181 | 3621 | 2805 |
| MEAN | 102 | 137 | 119 | 72.6 | 937 | 297 | 253 | 847 | 211 | 199 | 117 | 93.5 |
| MAX | 412 | 459 | 208 | 92 | 3130 | 769 | 463 | 4360 | 357 | 441 | 140 | 373 |
| MIN | 71 | 76 | 81 | 62 | 62 | 142 | 158 | 225 | 131 | 131 | 86 | 70 |

CAL YR 1980 TOTAL 106709 MEAN 292 MAX 5350 MIN 70
WTR YR 1981 TOTAL 101456 MEAN 278 MAX 4360 MIN 62

## 01438500 DELAWARE RIVER AT MONTAGUE, NJ

**LOCATION.**--Lat 41°18'33", long 74°47'44", Sussex County, Hydrologic Unit 02040104, on right bank 0.4 mi (0.6 km) upstream from toll bridge on U.S. Route 206 at Montague, 0.8 mi (1.3 km) downstream from Sawkill Creek, and at mile 246.3 (396.3 km). Water-quality samples collected from toll bridge.

**DRAINAGE AREA.**--3,480 mi$^2$ (9,013 km$^2$).

### WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--March 1936 to September 1939 (gage heights only, published as "at Milford, PA"). October 1939 to current year. Monthly discharge only for some periods, published in WSP 1302.

**GAGE.**--Water-stage recorder. Datum of gage is 369.93 ft (112.755 m) National Geodetic Vertical Datum of 1929. Prior to Feb. 9, 1940, nonrecording gage on upstream side of left span of subsequently dismantled bridge at present site at datum 70 ft (21.3 m) lower.

**REMARKS.**--Water-discharge records good. Diurnal fluctuations at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake, and Neversink Reservoirs (see Delaware River Basin, reservoirs in) and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs (see Delaware River Basin, diversions).

**AVERAGE DISCHARGE.**--42 years, 5,874 ft$^3$/s (166.4 m$^3$/s), unadjusted.

**EXTREMES FOR PERIOD OF RECORD.**--Maximum discharge, 250,000 ft$^3$/s (7,080 m$^3$/s) Aug. 19, 1955, gage height, 35.15 ft (10.714 m), from rating curve extended above 90,000 ft$^3$/s (2,550 m$^3$/s) on basis of flood-routing study; minimum, 382 ft$^3$/s (10.8 m$^3$/s) Aug. 24, 1954, gage height, 3.83 ft (1.167 m), minimum daily, 412 ft$^3$/s (11.7 m$^3$/s) Aug. 23, 1954.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Flood of October 10, 1903, reached a stage of 35.5 ft (10.82 m) from floodmark, present datum.

**EXTREMES FOR CURRENT YEAR.**--Maximum discharge, 82,000 ft$^3$/s (2,322 m$^3$/s) Feb. 12, gage height, 21.36 ft (6.511 m), stage-discharge relation affected by ice; minimum discharge, 859 ft$^3$/s (24.3 m$^3$/s) Sept. 13, gage height, 4.39 ft (1.338 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1880 | 1520 | 3020 | 1400 | 1250 | 8010 | 1850 | 8900 | 2070 | 1850 | 1780 | 1610 |
| 2 | 1790 | 1580 | 2790 | 1300 | 1800 | 7030 | 2690 | 7150 | 2630 | 1870 | 1650 | 1680 |
| 3 | 1860 | 1810 | 2950 | 1350 | 5000 | 6050 | 4090 | 5510 | 2560 | 1890 | 1640 | 1660 |
| 4 | 2170 | 1670 | 4260 | 1300 | 8000 | 5540 | 3810 | 5430 | 2870 | 1560 | 2070 | 1680 |
| 5 | 1850 | 1630 | 3400 | 1200 | 6000 | 5410 | 3000 | 4310 | 3260 | 2060 | 1830 | 1670 |
| 6 | 1840 | 1590 | 2600 | 1400 | 4500 | 5160 | 3010 | 4020 | 3000 | 2270 | 1970 | 1700 |
| 7 | 1920 | 1590 | 2700 | 1300 | 3800 | 4470 | [illegible] | 3730 | 1910 | 2240 | 2030 | 1750 |
| 8 | 1950 | 1690 | 2700 | 1400 | 3800 | 3490 | 3340 | 3420 | 1670 | 2050 | 2000 | 1760 |
| 9 | 1970 | 1730 | 2590 | 1300 | 3800 | 3380 | 3110 | 2980 | 2090 | 2050 | 1870 | 2740 |
| 10 | 1890 | 1680 | 2750 | 1450 | 3200 | 3900 | 3020 | 2460 | 2030 | 2190 | 1690 | 2390 |
| 11 | 2070 | 1770 | 2860 | 1300 | 5000 | 3690 | 3030 | 3330 | 2030 | 1800 | 1760 | 2060 |
| 12 | 1780 | 1790 | 2480 | 1300 | 42000 | 3550 | 2830 | 22800 | 1960 | 1480 | 1700 | 1820 |
| 13 | 1750 | 1700 | 2150 | 1350 | 24000 | 3380 | 2830 | 32300 | 1860 | 1540 | 1740 | 1380 |
| 14 | 1810 | 1630 | 2040 | 1300 | 15000 | 3190 | 3780 | 19400 | 1650 | 1800 | 1750 | 1640 |
| 15 | 1780 | 1580 | 1650 | 1200 | 10000 | 2430 | 5290 | 14400 | 2570 | 1560 | 1790 | 1890 |
| 16 | 1770 | 1600 | 1570 | 1350 | 7600 | 2260 | 5340 | 23600 | 3810 | 1540 | 1760 | 1820 |
| 17 | 1780 | 1610 | 1300 | 1450 | 6600 | 2780 | 4550 | 20800 | 3070 | 1810 | 1740 | 1380 |
| 18 | 1840 | 2140 | 1800 | 1250 | 8000 | 2510 | 3950 | 14800 | 2280 | 1730 | 1770 | 1200 |
| 19 | 1630 | 1860 | 1800 | 1350 | 10000 | 2260 | 3690 | 11400 | 2040 | 1620 | 1700 | 1500 |
| 20 | 1520 | 1770 | 2000 | 1450 | 18000 | 2130 | 3370 | 8980 | 1990 | 1630 | 1700 | 1660 |
| 21 | 1580 | 1630 | 1450 | 1450 | 47000 | 2190 | 3430 | 7350 | 1680 | 2190 | 1690 | 1600 |
| 22 | 1650 | 1670 | 1400 | 1250 | 26000 | 1650 | 3210 | 6320 | 1770 | 2290 | 1710 | 1890 |
| 23 | 1610 | 1480 | 1800 | 1300 | 18200 | 1730 | 3170 | 5240 | 2470 | 1980 | 1750 | 1780 |
| 24 | 1580 | 1630 | 2000 | 1250 | 20100 | 1700 | 4080 | 4110 | 2570 | 1450 | 1720 | 1840 |
| 25 | 1770 | 4370 | 1900 | 1250 | 19000 | 1620 | 5400 | 3610 | 2350 | 1560 | 1740 | 1870 |
| 26 | 2370 | 7210 | 1550 | 1250 | 13900 | 1570 | 4180 | 3620 | 2030 | 1560 | 1700 | 1770 |
| 27 | 2480 | 5090 | 1600 | 1350 | 11300 | 1540 | 3960 | 3440 | 1650 | 1760 | 1700 | 1610 |
| 28 | 2240 | 3850 | 1550 | 1300 | 9490 | 1620 | 4150 | 2920 | 1610 | 1960 | 1700 | 1620 |
| 29 | 1560 | 3520 | 1700 | 1250 | --- | 1490 | 4500 | 3070 | 1640 | 1790 | 1740 | 2060 |
| 30 | 1240 | 3410 | 1900 | 1250 | --- | 1420 | 7260 | 2870 | 1950 | 1800 | 1700 | 1770 |
| 31 | 1220 | --- | 1800 | 1250 | --- | 1760 | --- | 2200 | --- | 1700 | 1710 | --- |
| TOTAL | 56150 | 67800 | 68060 | 40850 | 352340 | 98910 | 113500 | 264470 | 67070 | 56580 | 54800 | 52800 |
| MEAN | 1811 | 2260 | 2195 | 1318 | 12580 | 3191 | 3783 | 8531 | 2236 | 1825 | 1768 | 1760 |
| MAX | 2480 | 7210 | 4260 | 1450 | 47000 | 8010 | 7260 | 32300 | 3810 | 2290 | 2070 | 2740 |
| MIN | 1220 | 1480 | 1300 | 1200 | 1250 | 1420 | 1850 | 2200 | 1610 | 1450 | 1640 | 1200 |

CAL YR 1980 TOTAL 1403940 MEAN 3836 MAX 58400 MIN 1220
WTR YR 1981 TOTAL 1293330 MEAN 3543 MAX 47000 MIN 1200

(NOTE: WATER-QUALITY DATA FOR THIS STATION ARE NOT PUBLISHED IN THIS REPORT: THEY ARE PUBLISHED IN THE SERIES "WATER RESOURCES DATA FOR NEW JERSEY.")

## RESERVOIRS IN DELAWARE RIVER BASIN

01416900 PEPACTON RESERVOIR.--Lat 42°04'38", long 74°58'04", Delaware County, Hydrologic Unit 02040102, near release chamber at Downsville Dam on East Branch Delaware River, and 1.6 mi (2.6 km) east of Downsville, N.Y. DRAINAGE AREA, 371 mi$^2$ (961 km$^2$). PERIOD OF RECORD, September 1954 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).

Reservoir is formed by an earthfill rockfaced dam. Storage began Sept. 15, 1954. Usable capacity 140,190 mil gal (530.6 hm$^3$) between minimum operating level, elevation, 1,152.0 ft (351.13 m) and crest of spillway, elevation, 1,280.0 ft (390.14 m). Capacity: at crest of spillway 149,700 mil gal (566.6 hm$^3$); at minimum operating level, 9,609 mil gal (36.37 hm$^3$): at sill of diversion tunnel, elevation, 1,143.0 ft (348.39 m), 6,098 mil gal (23.08 hm$^3$); in dead storage below release outlet, elevation, 1,126.50 ft (343.357 m), 1,898 mil gal (7.184 hm$^3$). Figures given herein represent total contents. Reservoir impounds water for diversion through East Delaware Tunnel to Rondout Reservoir on Rondout Creek, in Hudson River basin (see elsewhere in this section), for water supply to City of New York; for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master; and for conservation release. No diversion prior to Jan. 6, 1955. Records furnished by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 154,027 mil gal (583.0 hm$^3$) Apr. 5, 1960, elevation, 1,282.27 ft (390.836 m); minimum observed (after first filling), 9,575 mil gal (36.24 hm$^3$) Dec. 26, 1964, elevation, 1,151.92 ft (351.105 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 125,753 mil gal (476.0 hm$^3$) May 25, elevation, 1,266.31 ft (385.971 m); minimum, 48,338 mil gal (183.0 hm$^3$) Feb. 2, elevation, 1,206.86 ft (367.851 m).

01424997 CANNONSVILLE RESERVOIR.--Lat 42°03'46", long 75°22'29", Delaware County, Hydrologic Unit 02040101, in emergency gate tower at Cannonsville Dam on West Branch Delaware River, and 1.8 mi (2.9 km) southeast of Stilesville, N.Y. DRAINAGE AREA, 454 mi$^2$ (1,176 km$^2$). PERIOD OF RECORD, October 1963 to current year. REVISED RECORDS, WRD NY 1972: 1966. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).

Reservoir is formed by an earthfill rockfaced dam. Storage began Sept. 30, 1963. Usable capacity 95,706 mil gal (362.2 hm$^3$) between minimum operating level, elevation, 1,040.0 ft (316.99 m) and crest of spillway, elevation, 1,150.0 ft (350.52 m). Capacity, at crest of spillway, 98,618 mil gal (373.3 hm$^3$); at minimum operating level, 2,912 mil gal (11.02 hm$^3$): at mouth of inlet channel to diversion tunnel, elevation, 1,035.0 ft (315.47 m), 1,892 mil gal (7.161 hm$^3$); in dead storage below release outlet elevation, 1,020.5 ft (311.05 m), 328 mil gal (1.241 hm$^3$). Figures given herein represent total contents. Impounded water is diverted for New York City water supply via West Delaware Tunnel to Rondout Reservoir in Hudson River basin (see elsewhere in this section); is released in Delaware River for downstream low flow augmentation, as directed by the Delaware River Master; and is released for conservation flow in the Delaware River. No diversion prior to January 29, 1964. Records furnished by Bureau of Water Resources Development, City of New York.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 108,116 mil gal (409.2 hm$^3$) Mar. 15, 1977, elevation, 1,155.85 ft (352.303 m); minimum observed (after first filling), 11,901 mil gal (45.05 hm$^3$) Nov. 7, 1968, elevation, 1,066.24 ft (324.990 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 89,784 mil gal (339.8 hm$^3$) Jun. 11, elevation, 1,144.15 ft (348.737 m); minimum, 23,213 mil gal (87.86 hm$^3$) Nov. 20, elevation, 1,084.70 ft (330.617 m).

01433000 SWINGING BRIDGE RESERVOIR.--Lat 41°34'25", long 74°47'00", Sullivan County, Hydrologic Unit 02040104, at dam on Mongaup River, and 1.8 mi (2.9 km) northwest of Fowlersville, N.Y. DRAINAGE AREA, 118 mi$^2$ (306 km$^2$) excluding Cliff Lake, Lebanon Lake, and Toronto Reservoir. PERIOD OF RECORD, January 1930 to current year. REVISED RECORDS, WSP 1552: 1951-54. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Orange and Rockland Utilities, Inc.). All capacity figures given herein are based on zero storage at minimum operating pool level, 1,010 ft (308 m).

Reservoir is formed by an earthfill dam. Storage began Jan. 19, 1930. Usable capacity, 1,436.6 mil ft$^3$ (40.7 hm$^3$) between elevations 1,010.0 ft (307.85 m), minimum operating pool, and 1,071.2 ft (326.50 m), top of flashboards. Capacity below elevation 1,010.0 ft (307.85 m), minimum operating pool, about 212.7 mil ft$^3$ (6.02 hm$^3$). Reservoir is used for storage of water for power. Figures given herein represent contents above 1,010.0 ft (307.85 m). Water is received from Cliff Lake, Lebanon Lake, and Toronto Reservoir. Records furnished by Orange and Rockland Utilities, Inc.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 1,461.6 mil ft$^3$ (41.4 hm$^3$) Mar. 14, 1977, elevation, 1,071.8 ft (326.68 m); minimum (after first filling), -141.4 mil ft$^3$ (4.00 hm$^3$) Dec. 2, 1938, elevation, 987.5 ft (300.99 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 1,424 mil ft$^3$ (40.3 hm$^3$) Feb. 20, elevation, 1,070.9 ft (326.41 m); minimum, 955.6 mil ft$^3$ (27.1 hm$^3$) Jan. 21, elevation, 1,058.4 ft (322.60 m).

01433100 TORONTO RESERVOIR.--Lat 41°37'15", long 74°49'55", Sullivan County, Hydrologic Unit 02040104, at dam on Black Lake Creek, and 2.5 mi (4.0 km) southeast of village of Black Lake, N.Y. DRAINAGE AREA, 23.2 mi$^2$ (60.1 km$^2$). PERIOD OF RECORD, January 1926 to current year. REVISED RECORDS, WSP 1552: 1951-54. WSP 1702: 1959 (M). GAGE, nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Orange and Rockland Utilities, Inc.). All capacity figures given herein are based on zero storage at minimum operating pool level, 1,165.0 ft (355.09 m).

Reservoir is formed by an earthfill dam completed July 24, 1926. Storage began Jan. 13, 1926. Usable capacity 1,098.2 mil ft$^3$ (31.1 hm$^3$) between elevations 1,165.0 ft (355.09 m), minimum operating pool, and 1,220.0 ft (371.86 m), top of permanent flashboards. Capacity below elevation 1,165.0 ft (355.09 m), minimum operating pool, about 26.8 mil ft$^3$ (0.759 hm$^3$). Reservoir is used for storage of water for power. Figures given herein represent contents above 1,165.0 ft (355.09 m). Records furnished by Orange and Rockland Utilities, Inc.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 1,171.2 mil ft$^3$ (33.2 hm$^3$) July 20, 1945, elevation, 1,222.0 ft (372.47 m); minimum observed (after first filling), -26.8 mil ft$^3$ (0.759 hm$^3$) Nov. 15, 1928, elevation, 1,144.5 ft (348.84 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 722 mil ft$^3$ (20.4 hm$^3$) July 31, Aug. 1, elevation, 1,207.9 ft (368.17 m); minimum observed, 50.2 mil ft$^3$ (1.42 hm$^3$) Oct. 1, elevation, 1,173.2 ft (357.59 m).

01433200 CLIFF LAKE.--Lat 41°35'00", long 74°47'40", Sullivan County Hydrologic Unit 02040104, at dam on Black Lake Creek, and 2.5 mi (4.0 km) northwest of Fowlersville, N.Y. DRAINAGE AREA, 6.46 mi$^2$ (16.7 km$^2$), excluding area above Toronto Reservoir. PERIOD OF RECORD, January 1939 to current year. REVISED RECORDS, WSP 1552: 1951-54. WDR NY-75-1: 1974(m). GAGE, nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Orange and Rockland Utilities, Inc.). All capacity figures given herein are based on zero storage at minimum operating pool level, 1,043.3 ft (318.00 m).

Reservoir is formed by a concrete gravity-type dam. Storage began Jan. 6, 1939. Usable capacity, 136.06 mil ft$^3$ (3.85 hm$^3$) between elevations 1,043.3 ft (318.00 m), minimum operating pool, and 1,072.0 ft (326.75 m), top of permanent flashboards. Capacity below elevation 1,043.3 ft (318.00 m), minimum operating pool, about 6.54 mil ft$^3$ (0.185 hm$^3$). Reservoir is used for storage of water for power. Water is received from Toronto and Lebanon Lake reservoirs and is discharged through a tunnel into Swinging Bridge Reservoir. Figures given herein represent contents above 1,043.3 ft (318.00 m). Records furnished by Orange and Rockland Utilities, Inc.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 145.44 mil ft$^3$ (4.12 hm$^3$) July 30, 31, 1945, elevation, 1,073.1 ft (327.08 m); minimum observed (after first filling), about -6.54 mil ft$^3$ (0.185 hm$^3$) Mar. 16, 1963, elevation, 1,038.0 ft (316.38 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 127.8 mil ft$^3$ (3.62 hm$^3$) Feb. 23, elevation, 1,071.0 ft (326.44 m); minimum observed, 44.6 mil ft$^3$ (1.26 hm$^3$) Jan. 19, elevation, 1,058.1 ft (322.51 m).

## RESERVOIRS IN DELAWARE RIVER BASIN--Continued

01435900 **NEVERSINK RESERVOIR.**--Lat 41°49'40", long 74°38'21", Sullivan County, Hydrologic Unit 02040104, at a gatehouse at Neversink Dam on Neversink River, and 2 mi (3 km) southwest of Neversink, N.Y. DRAINAGE AREA, 91.8 $mi^2$ (238 $km^2$). PERIOD OF RECORD, June 1953 to current year. GAGE, nonrecording gage read daily at 0900. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).

Reservoir is formed by an earthfill rockfaced dam. Storage began June 2, 1953. Usable capacity 34,941 mil gal (132.25 $hm^3$) between minimum operating level, elevation, 1,319.0 ft (402.03 m) and crest of spillway, elevation, 1,440.0 ft (438.91 m). Capacity at crest of spillway 37,146 mil gal (140.6 $hm^3$); at minimum operating level, 2,205 mil gal (8.35 $hm^3$); dead storage below diversion sill and outlet sill, elevation 1,314.0 ft (400.51 m), 1,680 mil gal (6.36 $hm^3$). Figures given herein represent total contents. Reservoir impounds water for diversion through Neversink-Grahamsville Tunnel to Rondout Reservoir on Rondout Creek, in Hudson River basin, for water supply of City of New York (see elsewhere in this section); for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master; and for conservation release. No diversion prior to Dec. 3, 1953. Records furnished by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 37,978 mil gal (143.7 $hm^3$) Apr. 25, 1961, elevation, 1,441.67 ft (439.421 m); minimum observed (after first filling), 1,985 mil gal (7.513 $hm^3$) Nov. 25, 1964, elevation, 1,316.98 ft (401.415 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 33,452 mil gal (126.6 $hm^3$) May 22, elevation, 1,432.29 ft (436.562 m); minimum observed, 4,412 mil gal (16.7 $hm^3$) Jan. 5, elevation, 1,335.95 ft (407.198 m).

### MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| Date | Elevation (feet) | Contents (million gallons) | Change in contents (equivalent in $ft^3/s$) | Elevation (feet) | Contents (million gallons) | Change in contents (equivalent in $ft^3/s$) | Elevation (feet) | Contents (million $ft^3$) | Change in contents (equivalent in $ft^3/s$) |
|---|---|---|---|---|---|---|---|---|---|
| | 01416900 Pepacton Reservoir ** | | | 01424997 Cannonsville Reservoir ** | | | 01433000 Swinging Bridge Reservoir * | | |
| Sept. 30 | 1,246.95 | 95,746 | | 1,104.32 | 40,461 | | 1,060.1 | 1,014 | |
| Oct. 31 | 1,232.64 | 76,711 | - 950 | 1,087.95 | 25,706 | - 736 | 1,061.0 | 1,045 | + 11.8 |
| Nov. 30 | 1,221.46 | 63,613 | - 675 | 1,093.04 | 29,878 | + 215 | 1,062.0 | 1,081 | + 13.7 |
| Dec. 31 | 1,217.72 | 59,512 | - 205 | 1,102.99 | 39,143 | + 462 | 1,062.4 | 1,095 | + 5.4 |
| CAL YR 1980 | - | - | - 251 | - | - | - 249 | - | - | - 4.2 |
| Jan. 31 | 1,206.87 | 48,348 | - 557 | 1,093.27 | 30,074 | - 453 | 1,058.8 | 969 | - 47.2 |
| Feb. 28 | 1,240.65 | 87,036 | +2,138 | 1,132.45 | 73,502 | +2,399 | 1,066.9 | 1,264 | +122 |
| Mar. 31 | 1,247.22 | 96,132 | + 454 | 1,129.63 | 69,784 | - 185 | 1,067.7 | 1,295 | + 11.7 |
| Apr. 30 | 1,256.00 | 109,176 | + 673 | 1,130.92 | 71,475 | + 87.1 | 1,067.2 | 1,276 | - 7.6 |
| May 31 | 1,265.69 | 124,719 | + 776 | 1,142.54 | 87,457 | + 798 | 1,066.2 | 1,237 | - 14.5 |
| June 30 | 1,259.80 | 115,135 | - 494 | 1,142.44 | 87,312 | - 7.5 | 1,067.5 | 1,288 | + 19.5 |
| July 31 | 1,252.31 | 103,570 | - 577 | 1,134.10 | 75,686 | - 580 | 1,066.7 | 1,256 | - 11.6 |
| Aug. 31 | 1,242.66 | 89,760 | - 689 | 1,114.23 | 51,093 | -1,227 | 1,065.5 | 1,210 | - 17.2 |
| Sept. 30 | 1,235.03 | 79,700 | - 519 | 1,100.91 | 37,083 | - 722 | 1,064.9 | 1,188 | - 8.8 |
| WTR YR 1981 | - | - | - 68.0 | - | - | - 14.3 | - | - | + 5.5 |

| Date | Elevation (feet) | Contents (million $ft^3$) | Change in contents (equivalent in $ft^3/s$) | Elevation (feet) | Contents (million $ft^3$) | Change in contents (equivalent in $ft^3/s$) | Elevation (feet) | Contents (million gallons) | Change in contents (equivalent in $ft^3/s$) |
|---|---|---|---|---|---|---|---|---|---|
| | 01433100 Toronto Reservoir * | | | 01433200 Cliff Lake * | | | 01435900 Neversink Reservoir ** | | |
| Sept. 30 | 1,173.2 | 50.2 | | 1,060.1 | 54.5 | | 1,384.38 | 15,292 | |
| Oct. 31 | 1,173.7 | 55.1 | + 1.8 | 1,060.9 | 56.8 | + 1.6 | 1,359.39 | 8,864 | -321 |
| Nov. 30 | 1,175.0 | 68.7 | + 5.2 | 1,061.6 | 62.8 | + 1.5 | 1,345.00 | 5,955 | -150 |
| Dec. 31 | 1,177.7 | 101 | + 12.2 | 1,062.1 | 65.7 | + 1.1 | 1,337.85 | 4,716 | - 61.8 |
| CAL YR 1980 | - | - | - 4.1 | - | - | - 1.4 | - | - | - 98.9 |
| Jan. 31 | 1,178.6 | 114 | + 4.5 | 1,058.8 | 47.9 | - 6.6 | 1,338.79 | 4,869 | + 7.7 |
| Feb. 28 | 1,191.7 | 331 | + 89.9 | 1,069.4 | 115 | + 27.7 | 1,402.80 | 21,338 | +910 |
| Mar. 31 | 1,194.8 | 396 | + 24.1 | 1,067.3 | 99.3 | - 5.9 | 1,408.30 | 23,374 | +102 |
| Apr. 30 | 1,198.4 | 478 | + 31.6 | 1,067.2 | 98.6 | - 0.3 | 1,417.41 | 26,969 | +185 |
| May 31 | 1,206.7 | 690 | + 79.3 | 1,066.7 | 95.1 | - 1.3 | 1,429.01 | 31,952 | +249 |
| June 30 | 1,207.5 | 712 | + 8.4 | 1,067.4 | 100 | + 1.9 | 1,420.86 | 28,403 | -183 |
| July 31 | 1,207.9 | 722 | + 4.1 | 1,066.6 | 94.4 | - 2.1 | 1,414.68 | 25,862 | -127 |
| Aug. 31 | 1,199.2 | 497 | - 84.3 | 1,067.0 | 97.2 | + 1.0 | 1,406.10 | 22,547 | -165 |
| Sept. 30 | 1,190.7 | 312 | - 71.4 | 1,066.0 | 90.3 | - 2.7 | 1,398.70 | 19,889 | -137 |
| WTR YR 1981 | - | - | + 8.3 | - | - | + 1.1 | - | - | + 19.5 |

* Elevation at 2400 hours.
** Elevation at 0900 hours on first day of following month.

## DIVERSIONS FROM DELAWARE RIVER BASIN

01415200 Diversion from Pepacton Reservoir (see preceding pages) on East Branch Delaware River to Rondout Reservoir on Rondout Creek, in Hudson River basin, for municipal supply of City of New York. No diversion prior to Jan. 6, 1955. Records furnished by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.
REVISED RECORDS, WRD NY 1971: 1970. Revised figures of diversion for the water year 1980, superseding those published in the report for 1980 are given herein.

014239000 Diversion from Cannonsville Reservoir (see preceding pages) on West Branch Delaware River to Rondout Reservoir on Rondout Creek, in Hudson River basin, for municipal supply of City of New York. No diversion prior to Jan. 29, 1964. Records furnished by Bureau of Water Resources Development, City of New York.
REVISED RECORDS, Revised figures of diversion for the water year 1980, superseding those published in the report for 1980 are given herein.

01435800 Diversion from Neversink Reservoir (see preceding pages) on Neversink River to Rondout Reservoir on Rondout Creek, in Hudson River basin, for municipal supply of City of New York. No diversion prior to Dec. 3, 1953. Records furnished by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.

DIVERSION, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

| Month | 01415200 Pepacton Reservoir | 01423900 Cannonsville Reservoir |
|---|---|---|
| October....... | 703 | 377 |
| November...... | 697 | 183 |
| December...... | 699 | 347 |
| CAL YR 1979 | 650 | 201 |
| January....... | 140 | 595 |
| February...... | 269 | 579 |
| March......... | 621 | 295 |
| April......... | 318 | 0 |
| May........... | 628 | 403 |
| June.......... | 634 | 293 |
| July.......... | 634 | 128 |
| August........ | 634 | 0.45 |
| September..... | 636 | 93.3 |
| WTR YR 1980 | 552 | 274 |

DIVERSION, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| Month | 01415200 Pepacton Reservoir | 01423900 Cannonsville Reservoir | 01435800 Neversink Reservoir |
|---|---|---|---|
| October....... | 652 | 258 | 324 |
| November...... | 631 | 86.5 | 215 |
| December...... | 635 | 48.3 | 151 |
| CAL YR 1980 | 537 | 231 | 230 |
| January....... | 640 | 140 | 18.9 |
| February...... | 399 | 390 | 0 |
| March......... | 0 | 766 | 34.6 |
| April......... | 63.4 | 739 | 18.1 |
| May........... | 469 | 303 | 223 |
| June.......... | 697 | 241 | 259 |
| July.......... | 677 | 270 | 166 |
| August........ | 698 | 478 | 156 |
| September..... | 697 | 405 | 152 |
| WTR YR 1981 | 522 | 343 | 144 |

## 04250750 SANDY CREEK NEAR ADAMS, NY
(National stream-quality accounting network station)

LOCATION.--Lat 43°48'48", long 76°04'30", Jefferson County, Hydrologic Unit 04140102, on left bank 250 ft (76 m) upstream from highway bridge on Liberty Street, 0.2 mi (0.3 km) downstream from tributary, 2.5 mi (4.0 km) downstream from Adams, and 10.0 mi (16.1 km) upstream from mouth. Water-quality sampling site at discharge station.

DRAINAGE AREA.--128 mi$^2$ (332 km$^2$).

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 523.71 ft (159.627 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Moderate diurnal fluctuation at low flow caused by mills above station.

AVERAGE DISCHARGE.--24 years, 272 ft$^3$/s (7.703 m$^3$/s), 28.86 in/yr (733 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,800 ft$^3$/s (334 m$^3$/s) Apr. 4, 1963, gage height, 11.01 ft (3.356 m), from rating curve extended above 5,500 ft$^3$/s (156 m$^3$/s) on basis of slope-area measurement of peak flow; minimum, 1.5 ft$^3$/s (0.042 m$^3$/s) Sept. 17, 18, 1963, Aug. 19, 1964; minimum daily, 2.2 ft$^3$/s (0.062 m$^3$/s) Sept. 7, 11, 1960, Sept. 17, 1963, Aug. 16, Sept. 22, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft$^3$/s (85 m$^3$/s) and maximum (*):

| Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|
| Oct. 26 | 1230 | 3,730 | 106 | 7.08 | 2.158 |
| Dec. 3 | 0230 | *4,260 | 121 | 7.66 | 2.335 |
| Dec. 8 | 2400 | 3,370 | 95 | 6.68 | 2.036 |
| Feb. 19 | 1830 | 4,230 | 120 | 7.62 | 2.323 |
| Aug. 11 | 1730 | 3,040 | 86 | 6.32 | 1.926 |

Minimum discharge, 15.3 ft$^3$/s (0.433 m$^3$/s) July 18, gage height, 1.12 ft (0.341 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 47 | 346 | 600 | 140 | 110 | 635 | 537 | 267 | 87 | 1120 | 89 | 60 |
| 2 | 40 | 306 | 1040 | 130 | 150 | 473 | 812 | 223 | 71 | 239 | 61 | 63 |
| 3 | 51 | 253 | 2410 | 130 | 270 | 343 | 379 | 195 | 61 | 128 | 47 | 107 |
| 4 | 53 | 256 | 1010 | 120 | 200 | 303 | 309 | 172 | 59 | 89 | 40 | 89 |
| 5 | 71 | 731 | 628 | 120 | 180 | 296 | 409 | 157 | 61 | 73 | 95 | 201 |
| 6 | 62 | 428 | 428 | 120 | 190 | 260 | 333 | 164 | 59 | 65 | 204 | 180 |
| 7 | 64 | 928 | 373 | 110 | 200 | 249 | 303 | 192 | 60 | 57 | 115 | 157 |
| 8 | 62 | 1550 | 1310 | 110 | 180 | 253 | 253 | 157 | 52 | 46 | 103 | 136 |
| 9 | 51 | 975 | 2080 | 110 | 160 | 281 | 303 | 135 | 76 | 37 | 451 | 198 |
| 10 | 43 | 922 | 1000 | 100 | 150 | 270 | 385 | 119 | 94 | 33 | 261 | 180 |
| 11 | 40 | 614 | 573 | 100 | 250 | 263 | 343 | 115 | 71 | 28 | 1120 | 616 |
| 12 | 784 | 428 | 494 | 100 | 700 | 253 | 359 | 146 | 57 | 24 | 951 | 336 |
| 13 | 518 | 343 | 494 | 100 | 2300 | 260 | 274 | 162 | 61 | 22 | 495 | 224 |
| 14 | 282 | 409 | 362 | 98 | 2600 | 229 | 300 | 130 | 56 | 21 | 310 | 172 |
| 15 | 188 | 409 | 309 | 96 | 2000 | 226 | 340 | 172 | 76 | 22 | 364 | 150 |
| 16 | 145 | 306 | 303 | 94 | 1500 | 281 | 256 | 1030 | 71 | 20 | 685 | 126 |
| 17 | 129 | 223 | 249 | 92 | 1000 | 220 | 260 | 805 | 64 | 17 | 466 | 164 |
| 18 | 195 | 226 | 210 | 92 | 1800 | 186 | 1090 | 373 | 55 | 17 | 285 | 221 |
| 19 | 206 | 217 | 190 | 90 | 3460 | 192 | 580 | 258 | 42 | 19 | 207 | 162 |
| 20 | 195 | 213 | 170 | 90 | 3700 | 186 | 379 | 207 | 36 | 44 | 162 | 141 |
| 21 | 311 | 213 | 160 | 90 | 2770 | 170 | 324 | 172 | 32 | 317 | 134 | 139 |
| 22 | 528 | 246 | 150 | 88 | 2060 | 181 | 281 | 148 | 64 | 157 | 128 | 430 |
| 23 | 294 | 253 | 140 | 90 | 2000 | 233 | 267 | 126 | 233 | 84 | 145 | 785 |
| 24 | 206 | 333 | 130 | 90 | 1820 | 249 | 428 | 111 | 111 | 51 | 143 | 1010 |
| 25 | 429 | 898 | 130 | 92 | 1060 | 260 | 580 | 100 | 73 | 36 | 136 | 525 |
| 26 | 3240 | 487 | 130 | 96 | 795 | 249 | 508 | 94 | 74 | 29 | 102 | 360 |
| 27 | 1830 | 321 | 130 | 110 | 580 | 303 | 337 | 89 | 150 | 28 | 82 | 329 |
| 28 | 1020 | 747 | 140 | 110 | 473 | 289 | 285 | 82 | 86 | 34 | 79 | 377 |
| 29 | 779 | 934 | 150 | 110 | --- | 309 | 324 | 79 | 56 | 621 | 81 | 268 |
| 30 | 523 | 635 | 150 | 96 | --- | 545 | 340 | 84 | 46 | 278 | 78 | 218 |
| 31 | 403 | --- | 140 | 100 | --- | 939 | --- | 111 | --- | 143 | 67 | --- |
| TOTAL | 12789 | 15150 | 15783 | 3214 | 32658 | 9386 | 11878 | 6375 | 2194 | 3899 | 7686 | 8124 |
| MEAN | 413 | 505 | 509 | 104 | 1166 | 303 | 396 | 206 | 73.1 | 126 | 248 | 271 |
| MAX | 3240 | 1550 | 2410 | 140 | 3700 | 939 | 1090 | 1030 | 233 | 1120 | 1120 | 1010 |
| MIN | 40 | 213 | 130 | 88 | 110 | 170 | 253 | 79 | 32 | 17 | 40 | 60 |
| CFSM | 3.23 | 3.95 | 3.98 | .81 | 9.11 | 2.37 | 3.09 | 1.61 | .57 | .98 | 1.94 | 2.12 |
| IN. | 3.72 | 4.40 | 4.59 | .93 | 9.49 | 2.73 | 3.45 | 1.85 | .64 | 1.13 | 2.23 | 2.36 |

CAL YR 1980 TOTAL 102104.9 MEAN 279 MAX 3240 MIN 9.3 CFSM 2.18 IN 29.67
WTR YR 1981 TOTAL 129136.0 MEAN 354 MAX 3700 MIN 17 CFSM 2.77 IN 37.53

## 04250750 SANDY CREEK NEAR ADAMS, NY--Continued

### WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965, 1978 to current year.
CHEMICAL DATA: 1965, 1978 (c); 1979-80 (d), 1981 (c).
MINOR ELEMENTS DATA: 1978-79 (b), 1980 (c), 1981 (b).
ORGANIC DATA: OC--1978 (c), 1979-80 (d), 1981 (c).
NUTRIENT DATA: 1978 (c), 1979-80 (d), 1981 (c).
BIOLOGICAL DATA:
Bacteria--1978 (c), 1979-80 (d), 1981 (c).
Phytoplankton--1978-80 (c), 1981 (b).
Periphyton--1978-80 (b).
SEDIMENT DATA: 1978 (c), 1979-80 (d), 1981 (c).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1978 to current year.
WATER TEMPERATURES: January 1978 to current year.

INSTRUMENTATION.--Specific conductance and water temperature digital recorder installed July 29, 1980 at gaging station.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum observed, 540 micromhos Aug. 6 and 13, 1978; minimum recorded, 109 micromhos Dec. 3, 1980.
WATER TEMPERATURES: Maximum (1979-80 water years), 33.0°C July 24, 1979; minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 394 micromhos Jan. 31; minimum recorded, 109 micromhos Dec. 3.
WATER TEMPERATURES: Minimum, freezing point on many days during winter period.

REMARKS: Once-daily specific conductance and water temperature measurements were made at site 2 mi (3.2 km) downstream.

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS (CFS) | SPE-CIFIC CON-DUCT-ANCE (UMHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | TUR-BID-ITY (NTU) | BARO-METRIC PRES-SURE (MM OF HG) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) | STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) | HARD-NESS (MG/L AS CACO3) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 01... | 1130 | 47 | 313 | 8.3 | 15.5 | .60 | -- | 12.0 | 120 | 560 | 70 | 150 |
| JAN 19... | 1130 | 90 | 340 | 7.8 | .5 | .30 | 750 | 12.8 | 90 | 350 | 33 | 160 |
| MAR 16... | 1330 | 274 | 243 | 8.0 | 2.5 | .60 | 740 | 12.3 | 96 | 300 | 73 | 120 |
| MAY 19... | 1300 | 255 | 260 | 8.2 | 10.0 | .90 | 750 | 8.6 | 81 | 290 | K27 | 120 |
| JUL 28... | 1300 | 25 | 317 | 7.9 | 20.0 | .50 | 755 | 9.0 | 102 | K400 | 630 | 150 |
| SEP 22... | 1445 | 650 | 280 | 7.5 | 11.5 | 10 | 750 | 9.7 | 91 | >6000 | K12000 | 120 |

| DATE | HARD-NESS NONCAR-BONATE (MG/L AS CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | ALKA-LINITY LAB (MG/L AS CACO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 01... | 23 | 54 | 4.3 | 5.5 | 1.8 | 130 | 17 | 9.0 | .1 | 1.3 | 182 |
| JAN 19... | 20 | 57 | 4.2 | 6.0 | 1.2 | 140 | 18 | 8.7 | <.1 | 5.0 | 195 |
| MAR 16... | 26 | 43 | 2.7 | 4.2 | 1.1 | 93 | 11 | 6.8 | <.1 | 3.6 | 148 |
| MAY 19... | 10 | 43 | 3.0 | 3.9 | 1.1 | 110 | 12 | 5.9 | <.1 | 1.9 | 144 |
| JUL 28... | 23 | 54 | 4.3 | 6.7 | 1.6 | 130 | 14 | 9.4 | <.1 | 1.2 | 196 |
| SEP 22... | 10 | 43 | 3.1 | 3.3 | 1.4 | 110 | 12 | 5.0 | <.1 | 4.2 | 150 |

## 04250750 SANDY CREEK NEAR ADAMS, NY--Continued

### WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) | NITRO-GEN, ORGANIC TOTAL (MG/L AS N) | NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) | NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) | NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) | NITRO-GEN, TOTAL (MG/L AS N) | NITRO-GEN DIS-SOLVED (MG/L AS N) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 01... | 172 | .12 | .10 | .020 | .110 | .20 | .24 | .22 | .35 | .34 | .45 |
| JAN 19... | 191 | 1.6 | 1.6 | .020 | .040 | .23 | .14 | .25 | .18 | 1.9 | 1.8 |
| MAR 16... | 133 | .92 | .93 | .020 | .050 | .18 | .33 | .20 | .38 | 1.1 | 1.3 |
| MAY 19... | 139 | .43 | .41 | .020 | .020 | .23 | .34 | .25 | .36 | .68 | .77 |
| JUL 28... | 171 | .37 | .27 | <.010 | .030 | -- | .20 | .44 | .23 | .81 | .50 |
| SEP 22... | 136 | .28 | .32 | .030 | .020 | .62 | .34 | .65 | .36 | .93 | .68 |

| DATE | PHOS-PHORUS, TOTAL (MG/L AS P) | PHOS-PHORUS, DIS-SOLVED (MG/L AS P) | ARSENIC TOTAL (UG/L AS AS) | ARSENIC DIS-SOLVED (UG/L AS AS) | BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) | BARIUM, DIS-SOLVED (UG/L AS BA) | CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) | CADMIUM DIS-SOLVED (UG/L AS CD) | CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) | CHRO-MIUM, DIS-SOLVED (UG/L AS CR) | COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 01... | .030 | .040 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN 19... | .020 | .020 | 1 | 1 | <50 | 30 | 1 | 1 | 20 | 10 | 0 |
| MAR 16... | .050 | .040 | 0 | 0 | 100 | 100 | 0 | 0 | 10 | <10 | 0 |
| MAY 19... | .020 | .030 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUL 28... | .020 | .020 | 2 | 1 | <50 | 40 | 1 | <1 | 10 | 10 | 1 |
| SEP 22... | .060 | .020 | 2 | 1 | 100 | 100 | 1 | 1 | 10 | 10 | 3 |

| DATE | COBALT, DIS-SOLVED (UG/L AS CO) | COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) | COPPER, DIS-SOLVED (UG/L AS CU) | IRON, TOTAL RECOV-ERABLE (UG/L AS FE) | IRON, DIS-SOLVED (UG/L AS FE) | LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) | LEAD, DIS-SOLVED (UG/L AS PB) | MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) | MERCURY DIS-SOLVED (UG/L AS HG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 01... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN 19... | 0 | 2 | 0 | 130 | <10 | 0 | 0 | 20 | 8 | <.1 | <.1 |
| MAR 16... | 0 | 4 | 1 | 210 | 30 | 6 | 2 | 10 | 10 | .2 | .2 |
| MAY 19... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUL 28... | 1 | 5 | 3 | 70 | 20 | 2 | 3 | 10 | 4 | .2 | <.1 |
| SEP 22... | 2 | 8 | 3 | 1100 | 380 | 21 | 4 | 50 | <10 | <.1 | <.1 |

## 04250750 SANDY CREEK NEAR ADAMS, NY--Continued

### WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) | NICKEL, DIS- SOLVED (UG/L AS NI) | SELE- NIUM, TOTAL (UG/L AS SE) | SELE- NIUM, DIS- SOLVED (UG/L AS SE) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) | SILVER, DIS- SOLVED (UG/L AS AG) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) | ZINC, DIS- SOLVED (UG/L AS ZN) | CARBON, ORGANIC TOTAL (MG/L AS C) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) | CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | | |
| 01... | -- | -- | -- | -- | -- | -- | -- | -- | 5.8 | -- | -- |
| JAN | | | | | | | | | | | |
| 19... | 23 | 0 | 0 | 0 | 0 | 0 | 30 | 8 | -- | 3.7 | .3 |
| MAR | | | | | | | | | | | |
| 16... | 3 | 2 | 0 | 0 | 0 | 0 | 40 | 10 | -- | 8.9 | .2 |
| MAY | | | | | | | | | | | |
| 19... | -- | -- | -- | -- | -- | -- | -- | -- | 3.1 | -- | -- |
| JUL | | | | | | | | | | | |
| 28... | 5 | <1 | <1 | <1 | <1 | <1 | 10 | <4 | -- | 4.3 | -- |
| SEP | | | | | | | | | | | |
| 22... | 2 | 2 | <1 | <1 | <1 | <1 | 20 | 20 | -- | 3.8 | -- |

### SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | TIME | STREAM- FLOW, INSTAN- TANEOUS (CFS) | SEDI- MENT, SUS- PENDED (MG/L) | SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) | DATE | TIME | STREAM- FLOW, INSTAN- TANEOUS (CFS) | SEDI- MENT, SUS- PENDED (MG/L) | SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) |
|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | MAY | | | | |
| 01... | 1130 | 47 | 1 | .13 | 19... | 1300 | 255 | 5 | 3.4 |
| JAN | | | | | JUL | | | | |
| 19... | 1130 | 90 | 1 | .24 | 28... | 1300 | 25 | 3 | .20 |
| MAR | | | | | SEP | | | | |
| 16... | 1330 | 274 | 3 | 2.2 | 22... | 1445 | 650 | 36 | 63 |

## 04250750 SANDY CREEK NEAR ADAMS, NY--Continued

### QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

### PHYTOPLANKTON

| DATE | MAR 16,81 | | MAY 19,81 | | JUL 28,81 | | SEP 22,81 | |
|---|---|---|---|---|---|---|---|---|
| TIME | 1330 | | 1300 | | 1300 | | 1445 | |
| TOTAL CELLS/ML | 26 | | 650 | | 2100 | | 2700 | |
| DIVERSITY: DIVISION | 1.0 | | 0.6 | | 1.4 | | 1.1 | |
| .CLASS | 1.0 | | 0.6 | | 1.4 | | 1.1 | |
| ..ORDER | 1.0 | | 0.6 | | 1.9 | | 1.2 | |
| ...FAMILY | 1.0 | | 2.6 | | 3.3 | | 2.8 | |
| ....GENUS | 1.0 | | 2.6 | | 3.5 | | 2.9 | |
| ORGANISM | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT |
| CHLOROPHYTA (GREEN ALGAE) | | | | | | | | |
| .CHLOROPHYCEAE | | | | | | | | |
| ..CHLOROCOCCALES | | | | | | | | |
| ...CHARACIACEAE | | | | | | | | |
| ....SCHROEDERIA | -- | - | -- | - | -- | - | 22 | 1 |
| ...OOCYSTACEAE | | | | | | | | |
| ....ANKISTRODESMUS | -- | - | -- | - | 140 | 7 | 45 | 2 |
| ....TETRAEDRON | -- | - | -- | - | 14 | 1 | -- | - |
| ...SCENEDESMACEAE | | | | | | | | |
| ....SCENEDESMUS | -- | - | -- | - | 390# | 19 | 130 | 5 |
| ..VOLVOCALES | | | | | | | | |
| ...CHLAMYDOMONADACEAE | | | | | | | | |
| ....CHLAMYDOMONAS | -- | - | 55 | 9 | 84 | 4 | -- | - |
| ..ZYGNEMATALES | | | | | | | | |
| ...DESMIDIACEAE | | | | | | | | |
| ....COSMARIUM | -- | - | -- | - | 14 | 1 | 22 | 1 |
| CHRYSOPHYTA | | | | | | | | |
| .BACILLARIOPHYCEAE | | | | | | | | |
| ..CENTRALES | | | | | | | | |
| ...COSCINODISCACEAE | | | | | | | | |
| ....CYCLOTELLA | -- | - | -- | - | 84 | 4 | -- | - |
| ..PENNALES | | | | | | | | |
| ...ACHNANTHACEAE | | | | | | | | |
| ....ACHNANTHES | -- | - | 69 | 11 | 42 | 2 | 160 | 6 |
| ....COCCONEIS | -- | - | -- | - | 14 | 1 | 130 | 5 |
| ...CYMBELLACEAE | | | | | | | | |
| ....CYMBELLA | -- | - | 210# | 32 | 290 | 14 | 220 | 8 |
| ...DIATOMACEAE | | | | | | | | |
| ....DIATOMA | -- | - | -- | - | -- | - | 22 | 1 |
| ...FRAGILARIACEAE | | | | | | | | |
| ....FRAGILARIA | -- | - | 27 | 4 | 110 | 5 | -- | - |
| ....SYNEDRA | -- | - | 14 | 2 | 70 | 3 | 22 | 1 |
| ...GOMPHONEMATACEAE | | | | | | | | |
| ....GOMPHONEMA | -- | - | 27 | 4 | 28 | 1 | -- | - |
| ...NAVICULACEAE | | | | | | | | |
| ....NAVICULA | -- | - | 69 | 11 | 350# | 17 | 960# | 36 |
| ...NITZSCHIACEAE | | | | | | | | |
| ....NITZSCHIA | 13# | 50 | 160# | 26 | 210 | 10 | 560# | 21 |
| .CHRYSOPHYCEAE | | | | | | | | |
| ..CHRYSOMONADALES | | | | | | | | |
| ...OCHROMONADACEAE | | | | | | | | |
| ....OCHROMONAS | -- | - | -- | - | 14 | 1 | -- | - |
| CRYPTOPHYTA (CRYPTOMONADS) | | | | | | | | |
| .CRYPTOPHYCEAE | | | | | | | | |
| ..CRYPTOMONADALES | | | | | | | | |
| ...CRYPTOCHRYSIDACEAE | | | | | | | | |
| ....CHROOMONAS | -- | - | -- | - | 14 | 1 | -- | - |
| ...CRYPTOMONADACEAE | | | | | | | | |
| ....CRYPTOMONAS | -- | - | -- | - | 14 | 1 | -- | - |
| CYANOPHYTA (BLUE-GREEN ALGAE) | | | | | | | | |
| .CYANOPHYCEAE | | | | | | | | |
| ..CHROOCOCCALES | | | | | | | | |
| ...CHROOCOCCACEAE | | | | | | | | |
| ....AGMENELLUM | -- | - | -- | - | -- | - | 180 | 7 |
| ....ANACYSTIS | 13# | 50 | -- | - | 180 | 9 | -- | - |
| ..HORMOGONALES | | | | | | | | |
| ...OSCILLATORIACEAE | | | | | | | | |
| ....LYNGBYA | -- | - | -- | - | -- | - | 180 | 7 |
| EUGLENOPHYTA (EUGLENOIDS) | | | | | | | | |
| .EUGLENOPHYCEAE | | | | | | | | |
| ..EUGLENALES | | | | | | | | |
| ...EUGLENACEAE | | | | | | | | |
| ....EUGLENA | -- | - | 14 | 2 | -- | - | 22 | 1 |
| ....TRACHELOMONAS | -- | - | -- | - | -- | - | 22 | 1 |

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

### 04250750 SANDY CREEK NEAR ADAMS, NY--Continued

### SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 304 | 274 | 290 | 276 | 270 | 274 | 250 | 224 | 241 | --- | --- | --- |
| 2 | 306 | 299 | 302 | 276 | 269 | 272 | 237 | 122 | 215 | --- | --- | --- |
| 3 | 309 | 280 | 299 | 290 | 276 | 281 | 220 | 109 | 166 | --- | --- | --- |
| 4 | 303 | 282 | 291 | 291 | 255 | 282 | 254 | 221 | 237 | --- | --- | --- |
| 5 | 294 | 265 | 279 | 249 | 177 | 198 | 282 | 255 | 268 | --- | --- | --- |
| 6 | 303 | 281 | 288 | 242 | 214 | 232 | 293 | 269 | 281 | --- | --- | --- |
| 7 | 301 | 281 | 290 | 234 | 184 | 196 | 286 | 260 | 276 | --- | --- | --- |
| 8 | 308 | 287 | 294 | 210 | 146 | 174 | 260 | 118 | 196 | --- | --- | --- |
| 9 | 313 | 297 | 305 | 240 | 212 | 229 | 210 | 118 | 166 | --- | --- | --- |
| 10 | 335 | 306 | 316 | 233 | 214 | 220 | 232 | 211 | 223 | --- | --- | --- |
| 11 | 336 | 313 | 324 | 259 | 234 | 249 | 263 | 233 | 251 | --- | --- | --- |
| 12 | 328 | 160 | 236 | 265 | 250 | 261 | 262 | 248 | 256 | --- | --- | --- |
| 13 | 254 | 196 | 225 | 279 | 261 | 270 | 254 | 238 | 244 | --- | --- | --- |
| 14 | 285 | 256 | 272 | 265 | 219 | 247 | 296 | 253 | 265 | --- | --- | --- |
| 15 | 310 | 287 | 297 | 249 | 219 | 235 | 310 | 263 | 287 | --- | --- | --- |
| 16 | 314 | 304 | 310 | 273 | 249 | 263 | 292 | 268 | 279 | --- | --- | --- |
| 17 | 324 | 314 | 316 | 313 | 272 | 292 | 315 | 292 | 301 | --- | --- | --- |
| 18 | 317 | 251 | 295 | 286 | 273 | 279 | 293 | 262 | 280 | --- | --- | --- |
| 19 | 275 | 247 | 264 | 284 | 270 | 278 | 303 | 261 | 279 | --- | --- | --- |
| 20 | 289 | 259 | 277 | 274 | 267 | 272 | 370 | 301 | 326 | 312 | 291 | 295 |
| 21 | 263 | 205 | 246 | 275 | 266 | 271 | 314 | 284 | 299 | 361 | 303 | 325 |
| 22 | 213 | 182 | 195 | 275 | 256 | 265 | 300 | 274 | 286 | 304 | 291 | 295 |
| 23 | 249 | 215 | 232 | 266 | 256 | 261 | 285 | 265 | 277 | 294 | 288 | 291 |
| 24 | 267 | 248 | 258 | 266 | 184 | 245 | 309 | 266 | 273 | 299 | 288 | 293 |
| 25 | 273 | 156 | 253 | 201 | 163 | 177 | --- | --- | --- | 323 | 284 | 301 |
| 26 | 152 | 128 | 136 | 246 | 203 | 231 | --- | --- | --- | 307 | 284 | 290 |
| 27 | 224 | 134 | 187 | 278 | 238 | 259 | --- | --- | --- | 290 | 264 | 273 |
| 28 | 238 | 224 | 234 | 251 | 180 | 214 | --- | --- | --- | 269 | 259 | 264 |
| 29 | 261 | 233 | 248 | 230 | 178 | 205 | --- | --- | --- | 297 | 268 | 281 |
| 30 | 269 | 260 | 266 | 247 | 230 | 240 | --- | --- | --- | 332 | 300 | 314 |
| 31 | 276 | 266 | 270 | --- | --- | --- | --- | --- | --- | 394 | 293 | 333 |
| MONTH | 336 | 128 | 268 | 313 | 146 | 246 | 370 | 109 | 257 | 394 | 259 | 296 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | 307 | 288 | 297 | 206 | 194 | 200 | 198 | 172 | 186 | --- | --- | --- |
| 2 | 308 | 174 | 240 | 219 | 205 | 214 | 193 | 164 | 175 | --- | --- | --- |
| 3 | 197 | 181 | 188 | 245 | 221 | 234 | 220 | 193 | 208 | --- | --- | --- |
| 4 | 228 | 198 | 213 | 257 | 227 | 238 | 228 | 221 | 225 | --- | --- | --- |
| 5 | 283 | 230 | 253 | 248 | 232 | 240 | 227 | 205 | 213 | --- | --- | --- |
| 6 | 252 | 216 | 234 | 264 | 236 | 249 | 222 | 209 | 218 | --- | --- | --- |
| 7 | 220 | 215 | 217 | 259 | 241 | 250 | 230 | 218 | 223 | --- | --- | --- |
| 8 | 227 | 217 | 220 | 251 | 241 | 249 | 242 | 229 | 235 | --- | --- | --- |
| 9 | 241 | 228 | 237 | 245 | 239 | 242 | 244 | 202 | 236 | --- | --- | --- |
| 10 | 247 | 237 | 241 | 247 | 242 | 245 | 230 | 200 | 214 | --- | --- | --- |
| 11 | 253 | 133 | 213 | 247 | 244 | 246 | 236 | 211 | 229 | --- | --- | --- |
| 12 | 183 | 134 | 161 | 256 | 246 | 250 | 224 | 208 | 214 | --- | --- | --- |
| 13 | 203 | 162 | 188 | 252 | 246 | 249 | 242 | 225 | 233 | --- | --- | --- |
| 14 | 200 | 183 | 191 | 281 | 253 | 268 | 244 | 209 | 236 | --- | --- | --- |
| 15 | 215 | 202 | 207 | 268 | 245 | 261 | 224 | 203 | 212 | --- | --- | --- |
| 16 | 212 | 203 | 209 | 245 | 235 | 239 | 239 | 224 | 231 | --- | --- | --- |
| 17 | 210 | 169 | 189 | 271 | 241 | 259 | 242 | 225 | 239 | --- | --- | --- |
| 18 | 169 | 145 | 162 | 296 | 251 | 274 | 224 | 176 | 190 | --- | --- | --- |
| 19 | 149 | 125 | 138 | 294 | 253 | 271 | 230 | 195 | 217 | --- | --- | --- |
| 20 | 133 | 123 | 129 | 280 | 258 | 268 | --- | --- | --- | 268 | 258 | 262 |
| 21 | 141 | 126 | 136 | 279 | 261 | 270 | --- | --- | --- | 275 | 266 | 269 |
| 22 | 152 | 131 | 143 | 271 | 249 | 265 | --- | --- | --- | 281 | 272 | 276 |
| 23 | 142 | 132 | 138 | 259 | 238 | 250 | --- | --- | --- | 284 | 275 | 280 |
| 24 | 157 | 131 | 142 | 244 | 235 | 240 | --- | --- | --- | 287 | 279 | 284 |
| 25 | 185 | 158 | 173 | 234 | 227 | 231 | --- | --- | --- | 292 | 286 | 289 |
| 26 | 199 | 186 | 193 | 237 | 224 | 230 | --- | --- | --- | 296 | 289 | 292 |
| 27 | 216 | 200 | 209 | 224 | 205 | 209 | --- | --- | --- | 302 | 293 | 296 |
| 28 | 226 | 206 | 218 | 215 | 195 | 205 | --- | --- | --- | 307 | 295 | 299 |
| 29 | --- | --- | --- | 207 | 178 | 201 | --- | --- | --- | 310 | 299 | 304 |
| 30 | --- | --- | --- | 177 | 153 | 167 | --- | --- | --- | 310 | 301 | 306 |
| 31 | --- | --- | --- | 171 | 146 | 155 | --- | --- | --- | 300 | 285 | 290 |
| MONTH | 308 | 123 | 196 | 296 | 146 | 238 | 244 | 164 | 218 | 310 | 258 | 287 |

## 04250750 SANDY CREEK NEAR ADAMS, NY--Continued

### SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 304 | 292 | 295 | --- | --- | --- | 296 | 275 | 285 | 348 | 297 | 328 |
| 2 | 314 | 301 | 304 | --- | --- | --- | 306 | 279 | 294 | 349 | 333 | 342 |
| 3 | 317 | 304 | 310 | --- | --- | --- | 316 | 281 | 303 | 350 | 314 | 325 |
| 4 | 320 | 305 | 314 | --- | --- | --- | 324 | 278 | 306 | 332 | 320 | 327 |
| 5 | 315 | 302 | 310 | --- | --- | --- | 328 | 227 | 305 | 328 | 269 | 295 |
| 6 | 322 | 309 | 315 | --- | --- | --- | 258 | 214 | 241 | 315 | 293 | 303 |
| 7 | 323 | 300 | 312 | --- | --- | --- | 302 | 261 | 284 | 320 | 307 | 313 |
| 8 | 326 | 313 | 318 | --- | --- | --- | 311 | 279 | 302 | 326 | 316 | 321 |
| 9 | 327 | 287 | 311 | --- | --- | --- | 306 | 182 | 234 | 324 | 266 | 286 |
| 10 | 300 | 286 | 292 | --- | --- | --- | 317 | 272 | 300 | 308 | 253 | 297 |
| 11 | 310 | 299 | 303 | --- | --- | --- | 330 | 154 | 249 | 273 | 197 | 229 |
| 12 | 321 | 307 | 312 | --- | --- | --- | 292 | 169 | 235 | 330 | 275 | 307 |
| 13 | 323 | 307 | 315 | --- | --- | --- | 332 | 293 | 318 | 337 | 326 | 331 |
| 14 | 322 | 314 | 316 | --- | --- | --- | 339 | 328 | 331 | 356 | 337 | 347 |
| 15 | --- | --- | --- | --- | --- | --- | 356 | 254 | 338 | 354 | 340 | 348 |
| 16 | --- | --- | --- | --- | --- | --- | 271 | 230 | 249 | 354 | 341 | 348 |
| 17 | --- | --- | --- | --- | --- | --- | 325 | 272 | 302 | 357 | 298 | 341 |
| 18 | --- | --- | --- | --- | --- | --- | 347 | 326 | 338 | 317 | 295 | 304 |
| 19 | --- | --- | --- | --- | --- | --- | 359 | 346 | 352 | 337 | 318 | 331 |
| 20 | --- | --- | --- | --- | --- | --- | 366 | 350 | 357 | 345 | 334 | 338 |
| 21 | --- | --- | --- | --- | --- | --- | 366 | 346 | 355 | 344 | 334 | 338 |
| 22 | --- | --- | --- | --- | --- | --- | 358 | 338 | 349 | 337 | 221 | 278 |
| 23 | --- | --- | --- | --- | --- | --- | 344 | 314 | 324 | 336 | 241 | 287 |
| 24 | --- | --- | --- | --- | --- | --- | 336 | 307 | 321 | 308 | 238 | 279 |
| 25 | --- | --- | --- | --- | --- | --- | 320 | 305 | 312 | --- | --- | --- |
| 26 | --- | --- | --- | --- | --- | --- | 334 | 318 | 326 | --- | --- | --- |
| 27 | --- | --- | --- | --- | --- | --- | 347 | 333 | 338 | --- | --- | --- |
| 28 | --- | --- | --- | --- | --- | --- | 347 | 316 | 335 | --- | --- | --- |
| 29 | --- | --- | --- | 294 | 151 | 179 | 344 | 313 | 329 | --- | --- | --- |
| 30 | --- | --- | --- | 242 | 188 | 215 | 340 | 308 | 322 | --- | --- | --- |
| 31 | --- | --- | --- | 275 | 243 | 260 | 341 | 303 | 327 | --- | --- | --- |
| MONTH | 327 | 286 | 309 | 294 | 151 | 218 | 366 | 154 | 308 | 357 | 197 | 314 |

### TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 17.5 | 14.0 | 15.5 | 6.5 | 5.5 | 6.0 | 5.0 | 2.5 | 3.5 | --- | --- | --- |
| 2 | 15.5 | 14.0 | 15.0 | 6.0 | 4.5 | 5.5 | 5.5 | 2.5 | 4.0 | --- | --- | --- |
| 3 | 14.5 | 12.0 | 13.5 | 7.0 | 3.5 | 5.5 | 4.5 | .0 | 1.0 | --- | --- | --- |
| 4 | 14.0 | 11.5 | 13.0 | 8.0 | 5.5 | 6.5 | 1.0 | .0 | .5 | --- | --- | --- |
| 5 | 12.0 | 10.5 | 11.5 | 8.0 | 5.5 | 7.0 | 2.0 | .0 | .5 | --- | --- | --- |
| 6 | 11.5 | 10.5 | 11.0 | 6.0 | 4.0 | 5.0 | 1.0 | .0 | .5 | --- | --- | --- |
| 7 | 12.0 | 10.5 | 11.0 | 7.5 | 4.0 | 6.0 | 2.0 | .5 | .5 | --- | --- | --- |
| 8 | 13.5 | 10.5 | 11.5 | 8.5 | 4.5 | 6.0 | 2.0 | .5 | 1.0 | --- | --- | --- |
| 9 | 13.5 | 10.5 | 11.5 | 6.5 | 4.0 | 4.5 | 2.5 | 1.0 | 1.5 | --- | --- | --- |
| 10 | 11.5 | 8.5 | 10.0 | 6.5 | 3.5 | 5.0 | 2.0 | 1.0 | 1.5 | --- | --- | --- |
| 11 | 14.0 | 9.5 | 11.0 | 3.5 | 2.5 | 3.0 | 2.0 | .5 | 1.0 | --- | --- | --- |
| 12 | 12.0 | 8.5 | 10.0 | 5.0 | 2.5 | 3.0 | 1.5 | .5 | 1.0 | --- | --- | --- |
| 13 | 10.0 | 8.0 | 9.0 | 4.5 | 2.0 | 3.0 | 1.0 | .5 | .5 | --- | --- | --- |
| 14 | 9.5 | 7.0 | 8.0 | 5.5 | 3.5 | 4.5 | 2.5 | .5 | 1.0 | --- | --- | --- |
| 15 | 9.0 | 6.5 | 8.0 | 5.0 | 3.5 | 4.0 | 2.5 | .5 | 1.5 | --- | --- | --- |
| 16 | 9.0 | 7.5 | 8.5 | 4.0 | 1.5 | 2.5 | 2.5 | .5 | 1.0 | --- | --- | --- |
| 17 | 13.0 | 8.5 | 10.5 | 2.0 | .5 | 1.0 | 3.0 | 1.0 | 2.0 | --- | --- | --- |
| 18 | 14.5 | 13.0 | 13.5 | 2.0 | .5 | 1.0 | 2.0 | .5 | 1.0 | --- | --- | --- |
| 19 | 14.0 | 10.5 | 11.0 | 2.5 | 1.0 | 1.5 | 1.5 | .0 | .5 | --- | --- | --- |
| 20 | 10.5 | 9.0 | 9.5 | 3.5 | 2.0 | 2.5 | --- | --- | --- | 2.5 | 1.5 | 1.5 |
| 21 | 9.0 | 7.5 | 8.0 | 3.0 | 1.5 | 2.5 | --- | --- | --- | 4.5 | .0 | 1.5 |
| 22 | 7.5 | 6.0 | 7.0 | 3.5 | 2.5 | 3.0 | --- | --- | --- | 1.5 | 1.0 | 1.0 |
| 23 | 7.5 | 5.0 | 6.0 | 4.5 | 2.0 | 3.0 | --- | --- | --- | 1.5 | 1.0 | 1.5 |
| 24 | 7.0 | 4.0 | 5.5 | 6.0 | 3.5 | 4.5 | --- | --- | --- | 2.0 | 1.0 | 1.5 |
| 25 | 7.0 | 5.0 | 6.0 | 3.5 | 2.5 | 3.0 | --- | --- | --- | 2.0 | 1.0 | 1.5 |
| 26 | 6.5 | 5.0 | 5.5 | 3.0 | .5 | 1.5 | --- | --- | --- | 1.5 | 1.0 | 1.0 |
| 27 | 5.5 | 4.5 | 5.0 | 2.5 | .0 | 1.5 | --- | --- | --- | 1.0 | 1.0 | 1.0 |
| 28 | 5.5 | 4.5 | 5.0 | 3.0 | 1.0 | 2.0 | --- | --- | --- | 1.5 | 1.0 | 1.0 |
| 29 | 6.0 | 4.5 | 5.0 | 2.0 | 1.0 | 2.0 | --- | --- | --- | 1.5 | .5 | 1.0 |
| 30 | 5.5 | 4.5 | 5.0 | 3.0 | 1.0 | 2.0 | --- | --- | --- | 1.0 | .0 | .0 |
| 31 | 6.5 | 4.5 | 5.5 | --- | --- | --- | --- | --- | --- | 1.0 | .0 | .5 |
| MONTH | 17.5 | 4.0 | 9.0 | 8.5 | .0 | 3.5 | 5.5 | .0 | 1.5 | 4.5 | .0 | 1.0 |

04250750 SANDY CREEK NEAR ADAMS, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | 1.0 | .5 | 1.0 | 4.0 | 2.0 | 3.0 | 12.0 | 5.5 | 8.5 | --- | --- | --- |
| 2 | 1.0 | 1.0 | 1.0 | 3.0 | 2.0 | 2.5 | 8.5 | 6.5 | 7.5 | --- | --- | --- |
| 3 | 1.0 | .5 | .5 | 3.0 | .5 | 1.5 | 13.0 | 5.5 | 9.0 | --- | --- | --- |
| 4 | 1.0 | .0 | .5 | 2.5 | 1.0 | 2.0 | 13.5 | 10.0 | 11.5 | --- | --- | --- |
| 5 | .5 | .0 | .0 | 4.5 | .5 | 2.5 | 12.5 | 8.5 | 11.0 | --- | --- | --- |
| 6 | .5 | .0 | .0 | 3.0 | 1.0 | 2.0 | 8.5 | 5.5 | 7.0 | --- | --- | --- |
| 7 | .5 | .5 | .5 | 3.0 | 1.0 | 2.0 | 9.5 | 3.5 | 6.5 | --- | --- | --- |
| 8 | .5 | .5 | .5 | 4.5 | 2.0 | 3.5 | 13.0 | 5.5 | 9.0 | --- | --- | --- |
| 9 | .5 | .5 | .5 | 4.5 | 2.5 | 3.5 | 13.0 | 8.5 | 10.5 | --- | --- | --- |
| 10 | .5 | .0 | .5 | 4.0 | 2.0 | 3.0 | 13.0 | 6.5 | 9.5 | --- | --- | --- |
| 11 | 1.0 | .5 | .5 | 4.0 | 2.0 | 3.0 | 11.0 | 8.5 | 9.5 | --- | --- | --- |
| 12 | 3.5 | .5 | 1.5 | 4.0 | 1.0 | 2.5 | 9.5 | 6.5 | 8.0 | --- | --- | --- |
| 13 | 1.0 | .5 | .5 | 3.5 | 2.0 | 2.5 | 12.5 | 5.5 | 9.0 | --- | --- | --- |
| 14 | 1.0 | .5 | .5 | 2.5 | .0 | 1.5 | 12.0 | 6.5 | 8.5 | --- | --- | --- |
| 15 | 1.0 | .5 | .5 | 4.5 | .5 | 2.5 | 9.0 | 4.5 | 7.0 | --- | --- | --- |
| 16 | .5 | .0 | .5 | 4.0 | 1.5 | 3.0 | 11.5 | 4.0 | 7.5 | --- | --- | --- |
| 17 | .5 | .0 | .5 | 2.0 | .0 | 1.0 | 10.0 | 7.0 | 8.0 | --- | --- | --- |
| 18 | .5 | .5 | .5 | 1.0 | .0 | .0 | 10.0 | 8.0 | 9.0 | --- | --- | --- |
| 19 | 1.0 | .5 | .5 | 1.0 | .0 | .0 | 10.0 | 6.0 | 7.5 | --- | --- | --- |
| 20 | 1.0 | .5 | 1.0 | 2.5 | .0 | 1.0 | --- | --- | --- | 17.0 | 9.0 | 12.5 |
| 21 | 3.0 | 1.0 | 2.0 | 3.5 | .5 | 2.0 | --- | --- | --- | 17.0 | 11.0 | 14.0 |
| 22 | 5.0 | 2.5 | 3.5 | 6.0 | 1.0 | 3.5 | --- | --- | --- | 20.0 | 13.0 | 16.5 |
| 23 | 5.0 | 3.5 | 4.0 | 6.5 | 2.0 | 4.0 | --- | --- | --- | 20.0 | 14.5 | 17.0 |
| 24 | 5.5 | 3.0 | 4.0 | 6.0 | 2.0 | 4.0 | --- | --- | --- | 19.5 | 15.0 | 17.0 |
| 25 | 4.5 | 3.5 | 4.0 | 6.5 | 3.0 | 5.0 | --- | --- | --- | 19.5 | 16.5 | 17.5 |
| 26 | 3.5 | 2.5 | 3.0 | 8.0 | 2.0 | 5.0 | --- | --- | --- | 21.5 | 16.5 | 18.5 |
| 27 | 4.5 | 2.0 | 3.0 | 6.5 | 4.5 | 5.0 | --- | --- | --- | 19.0 | 17.0 | 18.0 |
| 28 | 3.0 | 2.0 | 2.5 | 9.0 | 1.5 | 4.5 | --- | --- | --- | 21.0 | 17.0 | 19.0 |
| 29 | --- | --- | --- | 12.0 | 4.0 | 7.5 | --- | --- | --- | 21.5 | 17.5 | 19.5 |
| 30 | --- | --- | --- | 9.0 | 7.5 | 8.0 | --- | --- | --- | 19.0 | 16.5 | 17.5 |
| 31 | --- | --- | --- | 8.0 | 6.5 | 7.0 | --- | --- | --- | 20.0 | 15.0 | 17.5 |
| MONTH | 5.5 | .0 | 1.5 | 12.0 | .0 | 3.0 | 13.5 | 3.5 | 8.5 | 21.5 | 9.0 | 17.0 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 21.0 | 15.0 | 17.5 | --- | --- | --- | 23.5 | 19.5 | 21.5 | 23.0 | 20.0 | 21.0 |
| 2 | 23.5 | 16.5 | 19.0 | --- | --- | --- | 25.0 | 20.5 | 22.5 | 21.0 | 18.5 | 20.0 |
| 3 | 20.0 | 17.0 | 18.5 | --- | --- | --- | 24.0 | 21.5 | 22.5 | 19.0 | 18.0 | 18.5 |
| 4 | 22.0 | 17.0 | 19.0 | --- | --- | --- | 25.0 | 20.5 | 23.0 | 18.0 | 17.0 | 18.0 |
| 5 | 23.0 | 17.0 | 19.0 | --- | --- | --- | 23.0 | 21.0 | 22.0 | 18.0 | 17.0 | 17.5 |
| 6 | 23.5 | 17.5 | 20.0 | --- | --- | --- | 22.5 | 18.0 | 20.5 | 19.5 | 17.0 | 18.0 |
| 7 | 21.5 | 17.0 | 18.5 | --- | --- | --- | 23.5 | 19.5 | 21.5 | 20.5 | 18.0 | 19.5 |
| 8 | 20.5 | 15.0 | 17.5 | --- | --- | --- | 24.0 | 20.5 | 22.0 | 20.0 | 18.0 | 19.0 |
| 9 | 21.5 | 17.0 | 18.5 | --- | --- | --- | 22.5 | 19.5 | 21.0 | 18.5 | 15.0 | 16.5 |
| 10 | 19.5 | 16.5 | 17.5 | --- | --- | --- | 24.5 | 19.5 | 21.5 | 14.5 | 13.0 | 14.0 |
| 11 | 22.0 | 15.0 | 17.5 | --- | --- | --- | 23.5 | 19.0 | 20.5 | 17.5 | 13.5 | 15.0 |
| 12 | 19.5 | 17.0 | 17.5 | --- | --- | --- | 22.5 | 18.0 | 20.0 | 18.0 | 15.0 | 16.5 |
| 13 | 20.0 | 15.5 | 17.5 | --- | --- | --- | 21.0 | 18.0 | 19.0 | 19.0 | 15.0 | 17.0 |
| 14 | 20.0 | 17.5 | 18.5 | --- | --- | --- | 20.0 | 16.5 | 18.5 | 18.5 | 16.5 | 17.5 |
| 15 | --- | --- | --- | --- | --- | --- | 19.5 | 18.0 | 19.0 | 18.0 | 15.5 | 17.5 |
| 16 | --- | --- | --- | --- | --- | --- | 18.5 | 16.0 | 17.5 | 18.0 | 15.0 | 16.5 |
| 17 | --- | --- | --- | --- | --- | --- | 19.0 | 14.0 | 16.5 | 16.0 | 14.0 | 14.5 |
| 18 | --- | --- | --- | --- | --- | --- | 19.5 | 14.0 | 17.0 | 16.5 | 13.5 | 15.0 |
| 19 | --- | --- | --- | --- | --- | --- | 20.0 | 15.5 | 18.0 | 16.5 | 14.0 | 15.5 |
| 20 | --- | --- | --- | --- | --- | --- | 20.0 | 16.5 | 18.5 | 16.0 | 13.0 | 14.0 |
| 21 | --- | --- | --- | --- | --- | --- | 21.0 | 17.5 | 19.5 | 14.0 | 12.0 | 13.0 |
| 22 | --- | --- | --- | --- | --- | --- | 21.5 | 18.5 | 20.0 | 13.0 | 11.0 | 13.0 |
| 23 | --- | --- | --- | --- | --- | --- | 21.0 | 17.5 | 19.5 | 16.0 | 10.0 | 13.0 |
| 24 | --- | --- | --- | --- | --- | --- | 20.5 | 19.0 | 20.0 | 13.5 | 9.0 | 12.5 |
| 25 | --- | --- | --- | --- | --- | --- | 20.0 | 17.5 | 19.0 | --- | --- | --- |
| 26 | --- | --- | --- | --- | --- | --- | 20.0 | 16.0 | 18.5 | --- | --- | --- |
| 27 | --- | --- | --- | --- | --- | --- | 19.5 | 17.5 | 18.0 | --- | --- | --- |
| 28 | --- | --- | --- | --- | --- | --- | 20.5 | 16.0 | 18.0 | --- | --- | --- |
| 29 | --- | --- | --- | 17.5 | 15.0 | 15.5 | 21.5 | 19.0 | 20.0 | --- | --- | --- |
| 30 | --- | --- | --- | 21.0 | 14.0 | 17.5 | 21.5 | 19.5 | 20.0 | --- | --- | --- |
| 31 | --- | --- | --- | 22.0 | 17.5 | 20.0 | 22.5 | 20.0 | 21.0 | --- | --- | --- |
| MONTH | 23.5 | 15.0 | 18.5 | 22.0 | 14.0 | 17.5 | 25.0 | 14.0 | 20.0 | 23.0 | 9.0 | 16.5 |

## 04252500 BLACK RIVER NEAR BOONVILLE, NY

LOCATION.--Lat 43°30'42", long 75°18'25", Oneida County, Hydrologic Unit 04150101, on left bank at downstream side of bridge on Moose River Road, 0.8 mi (1.3 km) upstream from Sugar River, and 2 mi (3 km) northeast of Boonville.

DRAINAGE AREA.--295 mi² (764 km²).

PERIOD OF RECORD.--January 1911 to current year.

REVISED RECORDS.--WSP 759: Drainage area. WSP 784: 1934. WSP 1084: 1912(M), 1913, 1917-1919(M), 1922(M), 1924(M), 1926(M), 1928(M), 1930(M), 1933(M). WSP 1307: 1914(M).

GAGE.--Water-stage recorder. Datum of gage is 935.50 ft (285.140 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 27, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Occasional regulation by several headwater reservoirs. Forestport feeder diverts water from State Pond at Forestport 9 mi (14 km) upstream. That portion of diverted water which does not pass Black River Canal (flowing south), see station 04252000, returns to Black River below station through Mill Creek sluiceway. Slight diurnal fluctuation at medium and low flow caused by mill above station.

AVERAGE DISCHARGE.—70 years, 699 ft³/s (19.80 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,400 ft³/s (351 m³/s) Mar. 28, 1913, gage height, about 12.5 ft (3.81 m), from floodmarks; maximum gage height, 13.10 ft (3.993 m) Feb. 21, 1981 (ice jam); minimum observed discharge, about 5 ft³/s (0.14 m³/s) Aug. 26, 1918, gage height, 2.40 ft (0.732 m); minimum daily, 7 ft³/s (0.20 m³/s) Aug. 26, 1918.

EXTREMES FOR CURRENT YEAR.—Peak discharges above base of 3,900 ft³/s (110 m³/s) and maximum (*):

| Date | Time | Discharge (ft³/s) | Discharge (m³/s) | Gage height (ft) | Gage height (m) | Date | Time | Discharge (ft³/s) | Discharge (m³/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 21 | 0100 | ice jam | | *13.10 | 3.993 | Apr. 2 | 2130 | 4,280 | 121 | 8.71 | 2.655 |
| Feb. 23 | 0915 | *5,500 | 156 | 9.28 | 2.828 | | | | | | |

Minimum discharge, 89.7 ft³/s (2.54 m³/s) July 19, gage height, 3.53 ft (1.076 m); minimum daily, 105 ft³/s (2.97 m³/s) July 19.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 190 | 493 | 744 | 390 | 210 | 1170 | 3210 | 868 | 431 | 303 | 468 | 257 |
| 2 | 190 | 511 | 739 | 380 | 300 | 1020 | 3710 | 751 | 363 | 214 | 296 | 261 |
| 3 | 256 | 475 | 1580 | 360 | 540 | 824 | 3440 | 690 | 318 | 186 | 230 | 468 |
| 4 | 276 | 471 | 1390 | 340 | 640 | 709 | 2230 | 596 | 307 | 192 | 198 | 806 |
| 5 | 250 | 743 | 1070 | 330 | 680 | 685 | 1840 | 498 | 351 | 186 | 329 | 680 |
| 6 | 236 | 1130 | 808 | 310 | 700 | 633 | 1590 | 464 | 382 | 355 | 676 | 382 |
| 7 | 267 | 1090 | 667 | 340 | 660 | 614 | 1260 | 481 | 348 | 367 | 568 | 289 |
| 8 | 279 | 1230 | 755 | 330 | 640 | 578 | 1030 | 460 | 303 | 314 | 422 | 402 |
| 9 | 238 | 1270 | 1210 | 320 | 600 | 568 | 919 | 422 | 344 | 268 | 739 | 1210 |
| 10 | 197 | 1250 | 1360 | 300 | 560 | 542 | 1060 | 394 | 468 | 214 | 751 | 1090 |
| 11 | 182 | 1100 | 1000 | 270 | 500 | 524 | 991 | 472 | 431 | 159 | 494 | 991 |
| 12 | 185 | 887 | 885 | 260 | 720 | 511 | 991 | 958 | 359 | 142 | 564 | 932 |
| 13 | 214 | 730 | 903 | 250 | 940 | 515 | 887 | 1090 | 351 | 133 | 542 | 739 |
| 14 | 219 | 690 | 713 | 250 | 1100 | 489 | 874 | 849 | 363 | 157 | 498 | 614 |
| 15 | 214 | 660 | 464 | 250 | 1000 | 460 | 1490 | 709 | 481 | 140 | 578 | 506 |
| 16 | 203 | 610 | 470 | 250 | 940 | 515 | 1230 | 1040 | 502 | 145 | 769 | 447 |
| 17 | 200 | 500 | 450 | 250 | 880 | 443 | 991 | 1140 | 824 | 123 | 739 | 378 |
| 18 | 261 | 472 | 420 | 240 | 860 | 414 | 2000 | 862 | 818 | 123 | 542 | 991 |
| 19 | 415 | 418 | 470 | 240 | 820 | 371 | 2530 | 705 | 520 | 105 | 398 | 1830 |
| 20 | 470 | 400 | 400 | 230 | 1000 | 382 | 1560 | 633 | 367 | 237 | 307 | 938 |
| 21 | 473 | 381 | 410 | 220 | 1900 | 363 | 1110 | 582 | 336 | 751 | 244 | 806 |
| 22 | 462 | 380 | 430 | 220 | 3200 | 371 | 932 | 542 | 333 | 769 | 174 | 1640 |
| 23 | 436 | 356 | 450 | 220 | 4830 | 375 | 769 | 494 | 340 | 524 | 192 | 2570 |
| 24 | 388 | 378 | 440 | 220 | 4870 | 402 | 912 | 431 | 296 | 348 | 227 | 2880 |
| 25 | 404 | 642 | 410 | 220 | 4300 | 422 | 1040 | 390 | 237 | 227 | 292 | 1920 |
| 26 | 1590 | 750 | 400 | 230 | 2910 | 439 | 900 | 367 | 435 | 208 | 257 | 1110 |
| 27 | 2330 | 604 | 410 | 220 | 1880 | 502 | 739 | 351 | 788 | 402 | 205 | 906 |
| 28 | 1510 | 737 | 450 | 230 | 1310 | 564 | 661 | 336 | 591 | 515 | 186 | 1360 |
| 29 | 877 | 927 | 430 | 230 | --- | 614 | 671 | 336 | 394 | 1250 | 208 | 1350 |
| 30 | 630 | 846 | 370 | 220 | --- | 1120 | 925 | 340 | 371 | 1220 | 237 | 887 |
| 31 | 523 | --- | 410 | 200 | --- | 2880 | --- | 414 | --- | 800 | 230 | --- |
| TOTAL | 14565 | 21131 | 21108 | 8320 | 39490 | 20019 | 42492 | 18665 | 12752 | 11077 | 12560 | 29640 |
| MEAN | 470 | 704 | 681 | 268 | 1410 | 646 | 1416 | 602 | 425 | 357 | 405 | 988 |
| MAX | 2330 | 1270 | 1580 | 390 | 4870 | 2880 | 3710 | 1140 | 824 | 1250 | 769 | 2880 |
| MIN | 182 | 356 | 370 | 200 | 210 | 363 | 661 | 336 | 237 | 105 | 174 | 257 |

CAL YR 1980 TOTAL 217920 MEAN 595 MAX 4170 MIN 107
WTR YR 1981 TOTAL 251819 MEAN 690 MAX 4870 MIN 105

## 04254375 PANTHER LAKE OUTLET NEAR OLD FORGE, NY

**LOCATION.**--Lat 43°41'05", long 74°55'08", Herkimer County, Hydrologic Unit 04150101, on left bank, 0.1 mi (0.2 km) upstream from Little Moose Lake, 0.2 mi (0.3 km) downstream from outlet of Panther Lake, and about 3.2 mi (5.2 km) southeast of Old Forge.

**DRAINAGE AREA.**--0.48 mi² (1.24 km²).

**PERIOD OF RECORD.**--October 1977 to December 1981 (discontinued).

**GAGE.**--Water-stage recorder. Parshall Flume since October 1980. Altitude of gage is 1,820 ft (555 m), from topographic map. Oct. 1, 1977 to Sept. 30, 1978 at datum 0.11 ft lower and Oct. 1, 1978 to Oct. 22, 1980 at datum 1.11 lower (revised).

**REMARKS.**--Records fair prior to Oct. 23, 1980; good except those for winter periods, which are poor.

**EXTREMES FOR PERIOD OF RECORD.**--Maximum discharge, 5.7 ft³/s (0.16 m³/s) Apr. 1, 1979, gage height, 2.02 ft (0.616 m) datum then in use; maximum gage height, 6.14 ft (1.871 m) datum then in use, Mar. 12, 1979, ice jam; minimum discharge, 0.13 ft³/s (0.004 m³/s) July 12-14, 15, 18, 26, 27, 1978, gage height, 1.01 ft (0.308 m) datum then in use.

**EXTREMES FOR CURRENT PERIOD.**--Water year 1981: Maximum discharge during period, 5.5 ft³/s (0.16 m³/s) Feb. 24, gage height, 1.47 ft (0.448 m); minimum, 0.20 ft³/s (0.006 m³/s) July 18, 19, gage height 0.17 ft (0.052 m).

October to December 1981: Maximum discharge during period, 5.3 ft³/s (0.150 m³/s) Oct. 28, gage height 1.43 ft (0.436 m); minimum 0.51 ft³/s (0.014 m³/s) Dec. 20, gage height 0.31 ft (0.094 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .33 | 1.2 | 1.0 | .59 | .26 | 2.3 | 3.2 | 1.2 | .59 | .54 | .73 | .51 |
| 2 | .40 | 1.1 | 1.0 | .54 | .88 | 2.0 | 4.4 | 1.2 | .56 | .51 | .64 | .51 |
| 3 | .44 | 1.0 | 1.4 | .49 | .70 | 1.8 | 3.8 | 1.1 | .54 | .49 | .59 | 1.0 |
| 4 | .42 | 1.1 | 1.3 | .46 | .91 | 1.5 | 3.3 | 1.0 | .51 | .46 | .59 | .97 |
| 5 | .40 | 1.4 | 1.2 | .44 | 1.1 | 1.3 | 3.0 | .97 | .49 | .46 | .64 | .88 |
| 6 | .35 | 1.4 | 1.1 | .42 | 1.1 | 1.2 | 2.7 | .91 | .46 | .44 | .64 | .79 |
| 7 | .33 | 1.6 | 1.0 | .51 | 1.1 | 1.1 | 2.4 | .82 | .42 | .44 | .59 | .73 |
| 8 | .35 | 2.1 | 1.1 | .54 | 1.1 | 1.0 | 2.1 | .79 | .39 | .44 | .64 | .91 |
| 9 | .35 | 2.2 | 1.6 | .62 | 1.1 | 1.0 | 1.9 | .76 | .46 | .42 | .73 | 1.2 |
| 10 | .28 | 2.1 | 1.6 | .56 | .97 | .91 | 1.9 | .73 | .44 | .39 | .67 | 1.2 |
| 11 | .30 | 2.0 | 1.5 | .49 | 1.3 | .91 | 1.9 | .76 | .44 | .35 | 1.0 | 1.3 |
| 12 | .35 | 1.8 | 1.4 | .49 | 1.8 | .91 | 2.0 | 1.0 | .39 | .35 | 1.3 | 1.2 |
| 13 | .35 | 1.6 | 1.4 | .73 | 1.7 | .88 | 1.8 | .97 | .44 | .30 | 1.1 | 1.1 |
| 14 | .30 | 1.5 | 1.3 | .79 | 1.5 | .85 | 1.7 | .97 | .44 | .26 | 1.0 | 1.0 |
| 15 | .30 | 1.4 | 1.4 | .70 | 1.3 | .85 | 1.6 | 1.1 | .51 | .26 | 1.2 | .97 |
| 16 | .30 | 1.2 | 1.3 | .62 | 1.1 | .85 | 1.6 | 1.3 | .49 | .24 | 1.6 | .88 |
| 17 | .33 | 1.1 | 1.2 | .51 | 1.0 | .79 | 1.6 | 1.2 | .56 | .22 | 1.4 | .91 |
| 18 | .48 | 1.1 | 1.1 | .49 | .97 | .76 | 2.3 | 1.0 | .51 | .20 | 1.2 | 1.2 |
| 19 | .50 | 1.1 | 1.1 | .51 | 1.1 | .76 | 2.3 | 1.0 | .49 | .20 | 1.1 | 1.1 |
| 20 | .47 | 1.0 | .97 | .51 | 1.9 | .70 | 2.1 | .94 | .46 | .39 | .94 | 1.0 |
| 21 | .50 | .94 | .88 | .44 | 3.1 | .67 | 1.8 | .85 | .44 | 1.0 | .85 | .91 |
| 22 | .54 | .88 | .88 | .44 | 3.7 | .64 | 1.7 | .82 | .49 | .79 | .76 | 1.4 |
| 23 | .62 | .82 | .85 | .46 | 4.3 | .62 | 1.6 | .76 | .56 | .67 | .70 | 1.7 |
| 24 | .62 | .85 | .82 | .46 | 5.1 | .62 | 1.6 | .73 | .51 | .62 | .70 | 2.3 |
| 25 | .73 | .97 | .73 | .44 | 4.9 | .62 | 1.6 | .79 | .56 | .56 | .67 | 2.1 |
| 26 | 1.6 | .97 | .64 | .44 | 3.9 | .59 | 1.4 | .76 | .62 | .51 | .62 | 1.9 |
| 27 | 1.8 | .91 | .64 | .46 | 3.1 | .59 | 1.3 | .70 | .64 | .59 | .56 | 1.7 |
| 28 | 1.7 | .94 | .64 | .46 | 2.6 | .59 | 1.3 | .67 | .62 | .64 | .51 | 1.6 |
| 29 | 1.5 | .97 | .70 | .46 | --- | .70 | 1.3 | .62 | .62 | 1.1 | .56 | 1.3 |
| 30 | 1.4 | 1.0 | .73 | .42 | --- | 1.3 | 1.3 | .62 | .56 | .91 | .54 | 1.2 |
| 31 | 1.2 | --- | .62 | .33 | --- | 2.6 | --- | .62 | --- | .82 | .51 | --- |
| TOTAL | 19.54 | 38.25 | 33.10 | 15.82 | 53.59 | 31.91 | 62.5 | 27.66 | 15.21 | 15.57 | 25.28 | 35.47 |
| MEAN | .63 | 1.28 | 1.07 | .51 | 1.91 | 1.03 | 2.08 | .89 | .51 | .50 | .82 | 1.18 |
| MAX | 1.8 | 2.2 | 1.6 | .79 | 5.1 | 2.6 | 4.4 | 1.3 | .64 | 1.1 | 1.6 | 2.3 |
| MIN | .28 | .82 | .62 | .33 | .26 | .59 | 1.3 | .62 | .39 | .20 | .51 | .51 |
| CFSM | 1.31 | 2.67 | 2.23 | 1.06 | 3.98 | 2.15 | 4.33 | 1.85 | 1.06 | 1.04 | 1.71 | 2.46 |
| IN. | 1.51 | 2.96 | 2.56 | 1.22 | 4.14 | 2.47 | 4.83 | 2.14 | 1.18 | 1.20 | 1.96 | 2.74 |

CAL YR 1980 TOTAL 340.30 MEAN .93 MAX 4.1 MIN .19 CFSM 1.94 IN 26.32
WTR YR 1981 TOTAL 373.90 MEAN 1.02 MAX 5.1 MIN .20 CFSM 2.13 IN 28.92

## 04254375 PANTHER LAKE OUTLET NEAR OLD FORGE, NY--Continued

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.1 | 2.5 | .94 | | | | | | | | | |
| 2 | 1.0 | 2.1 | .94 | | | | | | | | | |
| 3 | .97 | 1.9 | .91 | | | | | | | | | |
| 4 | 1.0 | 1.7 | .91 | | | | | | | | | |
| 5 | 1.1 | 1.6 | .88 | | | | | | | | | |
| 6 | 1.2 | 1.6 | .85 | | | | | | | | | |
| 7 | 1.6 | 1.6 | .79 | | | | | | | | | |
| 8 | 2.0 | 1.5 | .79 | | | | | | | | | |
| 9 | 2.0 | 1.4 | .79 | | | | | | | | | |
| 10 | 1.8 | 1.3 | .82 | | | | | | | | | |
| 11 | 1.6 | 1.2 | .82 | | | | | | | | | |
| 12 | 1.4 | 1.1 | .79 | | | | | | | | | |
| 13 | 1.3 | 1.0 | .76 | | | | | | | | | |
| 14 | 1.2 | 1.0 | .76 | | | | | | | | | |
| 15 | 1.1 | .97 | .73 | | | | | | | | | |
| 16 | 1.1 | .97 | .70 | | | | | | | | | |
| 17 | 1.0 | .97 | .70 | | | | | | | | | |
| 18 | 1.0 | .94 | .70 | | | | | | | | | |
| 19 | 1.2 | .97 | .70 | | | | | | | | | |
| 20 | 1.2 | 1.1 | .62 | | | | | | | | | |
| 21 | 1.1 | 1.2 | .64 | | | | | | | | | |
| 22 | 1.1 | 1.3 | .62 | | | | | | | | | |
| 23 | 1.2 | 1.2 | .76 | | | | | | | | | |
| 24 | 1.2 | 1.2 | .73 | | | | | | | | | |
| 25 | 1.1 | 1.1 | .73 | | | | | | | | | |
| 26 | 1.1 | 1.0 | .70 | | | | | | | | | |
| 27 | 2.4 | 1.0 | .67 | | | | | | | | | |
| 28 | 4.8 | 1.0 | .70 | | | | | | | | | |
| 29 | 4.8 | 1.0 | .76 | | | | | | | | | |
| 30 | 3.8 | 1.0 | .76 | | | | | | | | | |
| 31 | 3.1 | --- | .73 | | | | | | | | | |
| TOTAL | 51.57 | 38.42 | 23.70 | | | | | | | | | |
| MEAN | 1.66 | 1.28 | .76 | | | | | | | | | |
| MAX | 4.8 | 2.5 | .94 | | | | | | | | | |
| MIN | .97 | .94 | .62 | | | | | | | | | |
| CFSM | 3.46 | 2.67 | 1.58 | | | | | | | | | |
| IN. | 3.99 | 2.97 | 1.83 | | | | | | | | | |

CAL YR 1981 TOTAL 396.70 MEAN 1.09 MAX 5.1 MIN .20 CFSM 2.27 IN 30.68

## 04256000 INDEPENDENCE RIVER AT DONNATTSBURG, NY

LOCATION.--Lat 43°44'50", long 75°20'05", Lewis County, Hydrologic Unit 04150101, on right bank at downstream side of highway bridge on Donnattsburg Road at Donnattsburg, 1.2 mi (1.9 km) downstream from Chase Lake Outlet, 4.2 mi (6.8 km) northeast of Glenfield, and 5.0 mi (8.0 km) upstream from mouth.

DRAINAGE AREA.--91.7 mi² (238 km²).

PERIOD OF RECORD.--July 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is 972.84 ft (296.522 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 16, 1949, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--39 years, 192 ft³/s (5.437 m³/s), 28.43 in/yr (722 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,450 ft³/s (97.7 m³/s) May 20, 1969, gage height, 8.72 ft (2.658 m) from rating curve extended above 2,000 ft³/s (56.6 m³/s); minimum observed, 18 ft³/s (0.51 m³/s) Sept. 17, 1948, Aug. 4, 5, 1949, gage height, 2.85 ft (0.869 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft³/s (34 m³/s) and maximum (*):

| Date | Time | Discharge (ft³/s) | Discharge (m³/s) | Gage height (ft) | Gage height (m) | Date | Time | Discharge (ft³/s) | Discharge (m³/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Oct. 27 | 0630 | 1,260 | 35.7 | 6.12 | 1.865 | Mar. 31 | 2030 | 1,660 | 47.0 | 6.48 | 1.975 |
| Feb. 22 | 1900 | ice jam | | *7.33 | 2.234 | Sept. 24 | 1830 | 1,300 | 36.8 | 6.04 | 1.841 |
| Feb. 23 | 2100 | *1,760 | 49.8 | 6.62 | 2.018 | | | | | | |

Minimum discharge, 35 ft³/s (0.99 m³/s) July 19, gage height, 3.12 ft (0.951 m).

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 69 | 233 | 230 | 80 | 84 | 296 | 1170 | 219 | 85 | 115 | 137 | 86 |
| 2 | 65 | 233 | 219 | 78 | 96 | 256 | 1130 | 190 | 76 | 85 | 98 | 85 |
| 3 | 63 | 205 | 558 | 78 | 110 | 219 | 797 | 167 | 68 | 81 | 85 | 153 |
| 4 | 69 | 192 | 499 | 76 | 120 | 198 | 481 | 147 | 68 | 72 | 90 | 274 |
| 5 | 69 | 358 | 250 | 74 | 150 | 187 | 392 | 132 | 68 | 66 | 125 | 195 |
| 6 | 66 | 503 | 210 | 74 | 140 | 170 | 337 | 125 | 68 | 96 | 253 | 137 |
| 7 | 63 | 358 | 190 | 72 | 130 | 158 | 274 | 122 | 69 | 102 | 221 | 115 |
| 8 | 62 | 530 | 250 | 72 | 120 | 150 | 230 | 115 | 71 | 78 | 179 | 118 |
| 9 | 58 | 689 | 602 | 70 | 110 | 145 | 211 | 107 | 69 | 64 | 366 | 469 |
| 10 | 55 | 521 | 657 | 70 | 100 | 140 | 235 | 100 | 72 | 58 | 486 | 431 |
| 11 | 54 | 448 | 369 | 68 | 100 | 134 | 244 | 100 | 71 | 50 | 399 | 617 |
| 12 | 65 | 333 | 260 | 68 | 120 | 132 | 330 | 137 | 68 | 45 | 558 | 558 |
| 13 | 105 | 259 | 200 | 68 | 140 | 127 | 290 | 198 | 68 | 42 | 399 | 330 |
| 14 | 126 | 238 | 190 | 66 | 180 | 118 | 241 | 176 | 68 | 39 | 262 | 238 |
| 15 | 107 | 241 | 170 | 66 | 200 | 127 | 230 | 164 | 81 | 39 | 203 | 211 |
| 16 | 93 | 221 | 160 | 66 | 130 | 127 | 203 | 313 | 104 | 39 | 396 | 176 |
| 17 | 81 | 179 | 150 | 66 | 140 | 120 | 185 | 473 | 132 | 39 | 490 | 147 |
| 18 | 82 | 182 | 140 | 68 | 170 | 125 | 296 | 355 | 140 | 37 | 326 | 176 |
| 19 | 99 | 164 | 130 | 70 | 230 | 140 | 464 | 250 | 104 | 36 | 216 | 176 |
| 20 | 107 | 156 | 120 | 72 | 400 | 113 | 344 | 198 | 85 | 45 | 161 | 147 |
| 21 | 113 | 147 | 110 | 74 | 740 | 102 | 262 | 161 | 205 | 439 | 130 | 132 |
| 22 | 187 | 142 | 110 | 76 | 1100 | 98 | 224 | 137 | 185 | 750 | 107 | 224 |
| 23 | 205 | 130 | 100 | 78 | 1690 | 115 | 203 | 122 | 290 | 396 | 90 | 481 |
| 24 | 153 | 153 | 100 | 82 | 1710 | 107 | 259 | 109 | 293 | 205 | 96 | 1100 |
| 25 | 141 | 369 | 96 | 84 | 1320 | 111 | 303 | 98 | 219 | 132 | 107 | 858 |
| 26 | 629 | 392 | 94 | 76 | 689 | 118 | 313 | 96 | 323 | 102 | 92 | 435 |
| 27 | 1160 | 283 | 90 | 72 | 423 | 145 | 271 | 96 | 380 | 100 | 79 | 316 |
| 28 | 705 | 259 | 88 | 68 | 320 | 170 | 224 | 90 | 283 | 98 | 76 | 337 |
| 29 | 415 | 293 | 86 | 66 | --- | 203 | 208 | 86 | 187 | 233 | 72 | 303 |
| 30 | 303 | 274 | 84 | 70 | --- | 460 | 235 | 81 | 132 | 306 | 72 | 241 |
| 31 | 247 | --- | 82 | 76 | --- | 1280 | --- | 86 | --- | 208 | 72 | --- |
| TOTAL | 5816 | 8685 | 6594 | 2244 | 10962 | 6091 | 10586 | 4950 | 4132 | 4197 | 6443 | 9266 |
| MEAN | 188 | 290 | 213 | 72.4 | 392 | 196 | 353 | 160 | 138 | 135 | 208 | 309 |
| MAX | 1160 | 689 | 657 | 84 | 1710 | 1280 | 1170 | 473 | 380 | 750 | 558 | 1100 |
| MIN | 54 | 130 | 82 | 66 | 84 | 98 | 185 | 81 | 68 | 36 | 72 | 85 |
| CFSM | 2.05 | 3.16 | 2.32 | .79 | 4.28 | 2.14 | 3.85 | 1.75 | 1.51 | 1.47 | 2.27 | 3.37 |
| IN. | 2.36 | 3.52 | 2.67 | .91 | 4.45 | 2.47 | 4.29 | 2.01 | 1.68 | 1.70 | 2.61 | 3.76 |

CAL YR 1980 TOTAL 62503 MEAN 171 MAX 1650 MIN 36 CFSM 1.87 IN 25.36
WTR YR 1981 TOTAL 79966 MEAN 219 MAX 1710 MIN 36 CFSM 2.39 IN 32.44

## 04256484 WOODS LAKE NEAR BIG MOOSE, NY

LOCATION.--Lat 43°51'57", long 74°57'20", Herkimer County, Hydrologic Unit 04150101, on left bank, just upstream from dam at lake outlet and 3.6 mi (5.8 km) northwest of Big Moose.

DRAINAGE AREA.--0.80 mi² (2.07 km²).

PERIOD OF RECORD.--October 1978 to December 1981 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 1,990 ft (607 m), from topographic map.

REMARKS.--Lake level maintained by log and cobble dam at outlet. Lake level frequently affected by beaver dams near the outlet structure. Area of water surface, 0.10 mi² (0.259 km²).

EXTREMES FOR PERIOD OF RECORD.--Maximum observed gage height, 2.12 ft (0.646 m) Oct. 27, 28, 1978; minimum, 0.25 ft (.076 m) Sept. 1, 2, 1981. May have been higher or lower during periods of missing record.

EXTREMES FOR CURRENT PERIOD.--Water year 1981: Maximum gage height during period, 1.32 ft (0.402 m) June 23 (backwater from beaver dam), but may have been higher during periods of missing record; minimum 0.25 ft (0.076 m) Sept. 1, 2.

October to December 1981: Maximum gage height during period, 1.39 ft (0.424 m) Oct. 28; minimum 0.50 ft (0.152 m) Dec. 17-22, 31.

### GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .60 | .64 | .67 | .60 | .61 | .68 | 1.00 | .66 | .60 | .92 | .71 | .26 |
| 2 | .61 | .64 | .66 | .60 | .74 | .66 | 1.01 | .64 | .64 | .73 | .65 | .26 |
| 3 | .62 | .63 | .83 | .58 | .74 | .63 | .88 | .63 | .61 | .66 | .64 | .32 |
| 4 | .63 | .67 | .80 | .58 | .71 | .61 | .80 | .62 | .58 | .63 | .60 | .37 |
| 5 | .63 | .85 | .71 | .57 | .74 | .59 | .75 | .61 | .60 | .62 | .59 | .39 |
| 6 | .63 | .82 | .66 | .57 | .68 | .57 | .71 | .60 | .62 | .68 | .59 | .41 |
| 7 | .63 | .80 | .63 | .58 | .66 | .55 | .68 | .58 | .65 | .68 | .58 | .39 |
| 8 | .61 | .97 | .68 | .55 | .65 | .54 | .66 | .58 | .64 | .63 | .58 | .43 |
| 9 | .59 | .91 | .91 | .55 | .66 | .52 | .66 | .57 | .67 | .60 | .73 | .57 |
| 10 | .56 | .87 | .85 | .54 | .65 | .45 | .67 | .57 | .70 | .60 | .81 | .60 |
| 11 | .57 | .82 | .78 | .54 | .72 | .52 | .69 | .57 | .71 | .58 | .87 | .78 |
| 12 | .59 | .75 | .72 | .53 | .88 | .53 | .70 | .61 | .71 | .56 | .93 | .82 |
| 13 | .61 | .70 | .71 | .56 | .86 | .52 | .68 | .62 | .73 | .61 | .77 | .80 |
| 14 | .61 | .69 | .68 | .53 | .78 | .51 | .67 | .61 | .74 | .60 | .67 | .71 |
| 15 | .60 | .67 | .67 | .54 | .78 | .51 | .65 | .61 | .85 | .61 | .65 | .65 |
| 16 | .59 | .65 | .66 | .54 | .74 | .52 | .64 | .65 | .89 | .57 | .74 | .61 |
| 17 | .59 | .63 | .65 | .55 | .72 | .51 | .64 | .67 | 1.08 | .58 | .72 | .59 |
| 18 | .62 | .64 | .62 | .55 | .71 | .50 | .76 | .65 | 1.17 | .57 | .67 | .59 |
| 19 | .62 | .62 | .59 | .56 | .73 | .50 | .78 | .64 | 1.17 | .56 | .62 | .57 |
| 20 | .61 | .61 | .57 | .56 | .84 | .50 | .73 | .61 | 1.15 | .55 | .57 | .57 |
| 21 | .61 | .61 | .57 | .55 | 1.09 | .50 | .68 | .59 | 1.14 | .86 | .54 | .57 |
| 22 | .64 | .61 | .57 | .56 | 1.16 | .49 | .66 | .57 | --- | .97 | .49 | .67 |
| 23 | .64 | .60 | .58 | .58 | 1.06 | .48 | .65 | .56 | --- | .92 | .48 | .78 |
| 24 | .63 | .62 | .58 | .62 | 1.02 | .48 | .67 | .56 | --- | .86 | .47 | .91 |
| 25 | .65 | .70 | .58 | .57 | 1.06 | .49 | .68 | .57 | --- | .84 | .41 | .81 |
| 26 | .88 | .70 | .58 | .58 | .96 | .49 | .68 | .56 | --- | .78 | .38 | .73 |
| 27 | .90 | .68 | .59 | .58 | .82 | .50 | .67 | .58 | --- | .79 | .37 | .71 |
| 28 | .81 | .69 | .58 | .58 | .73 | .52 | .65 | .58 | --- | .76 | .36 | .71 |
| 29 | .72 | .69 | .59 | .59 | --- | .57 | .66 | .58 | --- | .83 | .33 | .68 |
| 30 | .68 | .68 | .60 | .59 | --- | .86 | .67 | .58 | 1.26 | .81 | .29 | .65 |
| 31 | .65 | --- | .60 | .59 | --- | 1.11 | --- | .60 | --- | .76 | .28 | --- |
| MEAN | .64 | .71 | .66 | .57 | .80 | .56 | .71 | .60 | --- | .70 | .58 | .60 |
| MAX | .90 | .97 | .91 | .62 | 1.16 | 1.11 | 1.01 | .67 | --- | .97 | .93 | .91 |
| MIN | .56 | .60 | .57 | .53 | .61 | .45 | .64 | .56 | --- | .55 | .28 | .26 |

### 04256484 WOODS LAKE NEAR BIG MOOSE, NY--Continued

### GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .63 | .67 | .57 | | | | | | | | | |
| 2 | .62 | .64 | .58 | | | | | | | | | |
| 3 | .64 | .62 | .58 | | | | | | | | | |
| 4 | .64 | .60 | .59 | | | | | | | | | |
| 5 | .64 | .59 | .58 | | | | | | | | | |
| 6 | .68 | .63 | .57 | | | | | | | | | |
| 7 | .80 | .67 | .56 | | | | | | | | | |
| 8 | .96 | .64 | .57 | | | | | | | | | |
| 9 | .91 | .63 | .58 | | | | | | | | | |
| 10 | .83 | .60 | .57 | | | | | | | | | |
| 11 | .76 | .60 | .56 | | | | | | | | | |
| 12 | .71 | .58 | .55 | | | | | | | | | |
| 13 | .67 | .56 | .54 | | | | | | | | | |
| 14 | .63 | .55 | .53 | | | | | | | | | |
| 15 | .62 | .57 | .53 | | | | | | | | | |
| 16 | .62 | .58 | .53 | | | | | | | | | |
| 17 | .61 | .60 | .50 | | | | | | | | | |
| 18 | .63 | .60 | .50 | | | | | | | | | |
| 19 | .71 | .62 | .51 | | | | | | | | | |
| 20 | .72 | .66 | .51 | | | | | | | | | |
| 21 | .71 | .69 | .51 | | | | | | | | | |
| 22 | .69 | .69 | .52 | | | | | | | | | |
| 23 | .69 | .65 | .55 | | | | | | | | | |
| 24 | .72 | .62 | .56 | | | | | | | | | |
| 25 | .69 | .60 | .55 | | | | | | | | | |
| 26 | .69 | .58 | .54 | | | | | | | | | |
| 27 | .98 | .61 | .54 | | | | | | | | | |
| 28 | 1.25 | .62 | .55 | | | | | | | | | |
| 29 | 1.05 | .61 | .55 | | | | | | | | | |
| 30 | .84 | .59 | .54 | | | | | | | | | |
| 31 | .73 | --- | .53 | | | | | | | | | |
| MEAN | .74 | .62 | .55 | | | | | | | | | |
| MAX | 1.25 | .69 | .59 | | | | | | | | | |
| MIN | .61 | .55 | .50 | | | | | | | | | |

## 04256485 WOODS LAKE OUTLET NEAR BIG MOOSE, NY

LOCATION.--43°51'57", long 74°57'20", Herkimer County, Hydrologic Unit 04150101, on right bank 45 ft (14 m) downstream from dam on Woods Lake.

DRAINAGE AREA.--0.80 mi² (2.07 km²).

PERIOD OF RECORD.--October 1977 to December 1981 (discontinued).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 1,980 ft (604 m), from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 69 ft³/s (1.95 m³/s) Oct. 30, 1978, gage height, 2.18 ft (0.664 m), from rating curve extended above 15 ft³/s (0.42 m³/s); minimum, 0.01 ft³/s (<0.001 m³/s) many days in 1978-1981; minimum gage-height recorded, 0.95 ft (0.290 m) June 25, 1979, but may have been less during period of doubtful gage-height record July 11-30, 1979.

EXTREMES FOR CURRENT PERIOD.--Water year 1981: Maximum discharge during period, 22 ft³/s (0.623 m³/s) Feb. 21, gage height, 1.94 ft (0.591 m); minimum, 0.01 ft³/s (<0.001 m³/s) June 14; minimum gage height 1.01 ft (0.308 m) July 19, 20.

October to December 1981: Maximum discharge during period, 23 ft³/s (0.651 m³/s) Oct. 28, gage height 1.95 ft (0.594 m); minimum 0.43 ft³/s (0.012 m³/s) Dec. 21, 22, gage height 1.32 ft (0.402 m).

REVISIONS.--The date for the maximum discharge for water year 1980 has been revised to Apr. 9, 1980 superseding the date published in the report for 1980.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .75 | 1.8 | 1.9 | .52 | .39 | 2.9 | 14 | 1.8 | .05 | 8.7 | 2.2 | 1.0 |
| 2 | .29 | 1.7 | 1.5 | .66 | 2.5 | 2.6 | 13 | 1.4 | .03 | 3.6 | 1.7 | .08 |
| 3 | .23 | 1.4 | 7.2 | .62 | 2.8 | 2.2 | 7.7 | 1.1 | .55 | 1.1 | 1.4 | .08 |
| 4 | .22 | 1.9 | 5.9 | .54 | 2.2 | 1.7 | 5.1 | .95 | .75 | .52 | 1.3 | .05 |
| 5 | .16 | 6.8 | 3.3 | .52 | 1.6 | 1.5 | 4.0 | .75 | .31 | .38 | 1.1 | .04 |
| 6 | .09 | 5.6 | 2.1 | .54 | 1.3 | 1.3 | 2.9 | .75 | .13 | .43 | 1.1 | .04 |
| 7 | .95 | 5.1 | 1.6 | .66 | 1.1 | 1.3 | 2.1 | .62 | .09 | 1.2 | .88 | .04 |
| 8 | 1.2 | 13 | 2.1 | .52 | 1.0 | 1.3 | 1.7 | .49 | .04 | 1.2 | .81 | .07 |
| 9 | .66 | 9.2 | 6.2 | .43 | 1.2 | 1.3 | 1.7 | .40 | .13 | .95 | 2.0 | .19 |
| 10 | .38 | 7.5 | 4.8 | .40 | .95 | 1.2 | 2.0 | .33 | .16 | 1.5 | 3.8 | .33 |
| 11 | .40 | 5.6 | 3.3 | .33 | 2.0 | 1.1 | 2.1 | .55 | .12 | .40 | 5.1 | 2.0 |
| 12 | .81 | 3.6 | 2.4 | .29 | 5.5 | 1.1 | 2.7 | 1.0 | .03 | .15 | 8.7 | 2.1 |
| 13 | 1.1 | 2.2 | 2.1 | .27 | 4.8 | 1.1 | 2.0 | 1.0 | .03 | .07 | 6.5 | 3.8 |
| 14 | .88 | 2.1 | 1.7 | .25 | 2.9 | 1.0 | 1.7 | .88 | .02 | .08 | 4.0 | 3.8 |
| 15 | .66 | 1.8 | 1.6 | .25 | 2.0 | .95 | 1.6 | .88 | .10 | .31 | 3.1 | 2.4 |
| 16 | .49 | 1.3 | 1.3 | .27 | 1.7 | 1.0 | 1.2 | 1.7 | .09 | .38 | 6.1 | 1.5 |
| 17 | .66 | 1.0 | 1.1 | .31 | 1.5 | 1.0 | 1.3 | 2.1 | .70 | .08 | 5.5 | 1.0 |
| 18 | 1.6 | 1.2 | 1.0 | .33 | 1.8 | 1.0 | 4.0 | 1.5 | 1.5 | .09 | 3.6 | 1.0 |
| 19 | 1.5 | .89 | 1.1 | .35 | 3.6 | .95 | 4.8 | .95 | 1.8 | .03 | 2.7 | .49 |
| 20 | 1.1 | .77 | .88 | .31 | 13 | .88 | 3.1 | 1.0 | 1.5 | .06 | 2.0 | .40 |
| 21 | 1.2 | .71 | .81 | .29 | 20 | .81 | 2.0 | .95 | 1.1 | 2.2 | 1.6 | .25 |
| 22 | 1.8 | .65 | .75 | .31 | 19 | .75 | 1.6 | .58 | .88 | 4.3 | 1.3 | 1.6 |
| 23 | 1.7 | .58 | .70 | .43 | 17 | .66 | 1.4 | .35 | 2.1 | 3.3 | 1.3 | 3.8 |
| 24 | 1.4 | .89 | .70 | .40 | 18 | .62 | 1.7 | .19 | 2.2 | 1.8 | 1.3 | 9.2 |
| 25 | 2.0 | 2.2 | .66 | .33 | 13 | .66 | 2.0 | .13 | 1.8 | 1.5 | 1.3 | 6.9 |
| 26 | 9.2 | 2.2 | .62 | .31 | 7.3 | .70 | 2.0 | .14 | 1.6 | 1.4 | 1.3 | 4.0 |
| 27 | 9.2 | 2.0 | .58 | .38 | 4.8 | .88 | 1.7 | .08 | 1.7 | 1.2 | 1.3 | 2.7 |
| 28 | 6.1 | 2.1 | .55 | .40 | 3.3 | 1.0 | 1.4 | .09 | 1.0 | 1.3 | 1.3 | 2.9 |
| 29 | 3.8 | 2.1 | .58 | .40 | --- | 1.7 | 1.7 | .07 | .52 | 3.3 | 1.2 | 2.2 |
| 30 | 2.7 | 2.0 | .66 | .38 | --- | 8.2 | 2.0 | .05 | 5.1 | 4.0 | 1.2 | 1.7 |
| 31 | 2.0 | --- | .58 | .31 | --- | 16 | --- | .06 | --- | 2.9 | 1.2 | --- |
| TOTAL | 55.23 | 89.89 | 60.27 | 12.31 | 156.24 | 59.36 | 96.2 | 22.84 | 26.13 | 48.43 | 77.89 | 55.66 |
| MEAN | 1.78 | 3.00 | 1.94 | .40 | 5.58 | 1.91 | 3.21 | .74 | .87 | 1.56 | 2.51 | 1.86 |
| MAX | 9.2 | 13 | 7.2 | .66 | 20 | 16 | 14 | 2.1 | 5.1 | 8.7 | 8.7 | 9.2 |
| MIN | .09 | .58 | .55 | .25 | .39 | .62 | 1.2 | .05 | .02 | .03 | .81 | .04 |
| CFSM | 2.23 | 3.75 | 2.43 | .50 | 6.98 | 2.39 | 4.01 | .93 | 1.09 | 1.95 | 3.14 | 2.33 |
| IN. | 2.56 | 4.17 | 2.80 | .57 | 7.26 | 2.76 | 4.47 | 1.06 | 1.21 | 2.25 | 3.62 | 2.58 |

CAL YR 1980 TOTAL 539.14 MEAN 1.47 MAX 14 MIN .02 CFSM 1.84 IN 25.04
WTR YR 1981 TOTAL 760.45 MEAN 2.08 MAX 20 MIN .02 CFSM 2.60 IN 35.32

## 04256485 WOODS LAKE OUTLET NEAR BIG MOOSE, NY--Continued

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.4 | 2.4 | 1.3 | | | | | | | | | |
| 2 | 1.3 | 1.8 | 1.2 | | | | | | | | | |
| 3 | 1.3 | 1.5 | 1.2 | | | | | | | | | |
| 4 | 1.5 | 1.1 | 1.3 | | | | | | | | | |
| 5 | 1.5 | .95 | 1.3 | | | | | | | | | |
| 6 | 1.6 | 1.2 | 1.2 | | | | | | | | | |
| 7 | 3.3 | 2.0 | 1.1 | | | | | | | | | |
| 8 | 7.3 | 1.8 | 1.1 | | | | | | | | | |
| 9 | 6.9 | 1.6 | 1.1 | | | | | | | | | |
| 10 | 4.3 | 1.3 | 1.1 | | | | | | | | | |
| 11 | 2.7 | 1.2 | 1.1 | | | | | | | | | |
| 12 | 2.6 | 1.1 | 1.0 | | | | | | | | | |
| 13 | 2.1 | .95 | .88 | | | | | | | | | |
| 14 | 1.6 | .95 | .81 | | | | | | | | | |
| 15 | 1.3 | .88 | .75 | | | | | | | | | |
| 16 | 1.2 | .88 | .75 | | | | | | | | | |
| 17 | 1.1 | .88 | .62 | | | | | | | | | |
| 18 | 1.2 | .95 | .62 | | | | | | | | | |
| 19 | 2.4 | 1.2 | .62 | | | | | | | | | |
| 20 | 2.7 | 1.7 | .62 | | | | | | | | | |
| 21 | 2.2 | 2.4 | .52 | | | | | | | | | |
| 22 | 2.1 | 2.6 | .49 | | | | | | | | | |
| 23 | 2.4 | 2.1 | .66 | | | | | | | | | |
| 24 | 3.1 | 1.7 | .70 | | | | | | | | | |
| 25 | 2.4 | 1.4 | .70 | | | | | | | | | |
| 26 | 2.2 | 1.2 | .70 | | | | | | | | | |
| 27 | 12 | 1.2 | .70 | | | | | | | | | |
| 28 | 19 | 1.5 | .70 | | | | | | | | | |
| 29 | 13 | 1.4 | .70 | | | | | | | | | |
| 30 | 6.5 | 1.4 | .70 | | | | | | | | | |
| 31 | 3.3 | --- | .70 | | | | | | | | | |
| TOTAL | 117.5 | 43.24 | 26.94 | | | | | | | | | |
| MEAN | 3.79 | 1.44 | .87 | | | | | | | | | |
| MAX | 19 | 2.6 | 1.3 | | | | | | | | | |
| MIN | 1.1 | .88 | .49 | | | | | | | | | |
| CFSM | 4.74 | 1.80 | 1.09 | | | | | | | | | |
| IN. | 5.46 | 2.01 | 1.25 | | | | | | | | | |

CAL YR 1981 TOTAL 742.74 MEAN 2.03 MAX 20 MIN .02 CFSM 2.54 IN 34.49

## 04256500 STILLWATER RESERVOIR NEAR BEAVER RIVER, NY

LOCATION.--Lat 43°53'50", long 75°03'05", Herkimer County, Hydrologic Unit 04150101, in gatehouse at Stillwater Dam on Beaver River, 2.5 mi (4.0 km) upstream from Moshier Creek, and 7.5 mi (12.1 km) west of Beaver River Post Office.

DRAINAGE AREA.--172 $mi^2$ (445 $km^2$).

PERIOD OF RECORD.--May 1908 to current year. Prior to February 1925, month end contents only, published in WSP 1307. February 1925 to September 1937, published in WSP 824.

GAGE.--Nonrecording gage read once daily and prior to reservoir gate changes. Datum of gage is National Geodetic Vertical Datum, adjustment of 1912.

REMARKS.--Reservoir originally formed about 1885; enlarged at various times and in 1924 enlarged to a usable capacity of 4,623 mil $ft^3$ (131 $hm^3$) between elevations 1,650.3 ft (503.01 m) and 1,679.3 ft (511.85 m) (top of 24-inch flashboards in place throughout year). Elevation of gate sill of lowest outlet, 1,642.3 ft (500.57 m). Capacity below elevation 1,650.3 ft (503.01 m), 90 mil $ft^3$ (2.55 $hm^3$), is included in records presented herein, but is not ordinarily available for release. Reservoir is used to regulate flow of Beaver and Black Rivers for flood control, power development, and general public welfare.

COOPERATION.--Records furnished by Board of Hudson River-Black River Regulating District.

EXTREMES FOR PERIOD OF RECORD.--Maximum observed elevation, 1,680.08 ft (512.088 m) May 20, 1969, contents, 4,939 mil $ft^3$ (140 $hm^3$); minimum observed since first filling, 1,644.80 ft (501.335 m) Mar. 25-27, 1949, contents, 8 mil $ft^3$ (0.227 $hm^3$).

EXTREMES FOR CURRENT YEAR.--Maximum observed elevation, 1,678.77 ft (511.689 m) April 13, 20, 21, contents, 4,560 mil $ft^3$ (129 $hm^3$); minimum observed, 1,666.42 ft (507.925 m) Feb. 11, contents, 1,756 mil $ft^3$ (49.7 $hm^3$).

Capacity table, current year (elevation, in feet, and contents, in millions of cubic feet)

| | | | |
|---|---|---|---|
| 1,658.0 | 604 | 1,670.0 | 2,431 |
| 1,660.0 | 821 | 1,675.0 | 3,556 |
| 1,665.0 | 1,518 | 1,680.0 | 4,916 |

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
INSTANTANEOUS OBSERVATIONS AT 0800

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1671.08 | 1670.23 | 1673.09 | 1673.17 | 1667.65 | 1673.23 | 1676.57 | 1678.47 | 1676.28 | 1676.28 | 1675.64 | 1675.47 |
| 2 | 1671.00 | 1670.28 | 1673.07 | 1673.05 | 1667.59 | 1673.49 | 1677.19 | 1678.41 | 1676.16 | 1676.28 | 1675.61 | 1675.39 |
| 3 | 1670.93 | 1670.29 | 1673.20 | 1672.93 | 1667.55 | 1673.71 | 1677.67 | 1678.35 | 1676.03 | 1676.23 | 1675.56 | 1675.37 |
| 4 | 1670.84 | 1670.30 | 1673.29 | 1672.80 | 1667.44 | 1673.82 | 1678.02 | 1678.26 | 1675.91 | 1676.26 | 1675.52 | 1675.33 |
| 5 | 1670.77 | 1670.40 | 1673.34 | 1672.67 | 1667.32 | 1674.08 | 1678.20 | 1678.17 | 1675.80 | 1676.28 | 1675.47 | 1675.28 |
| 6 | 1670.68 | 1670.58 | 1673.37 | 1672.53 | 1667.19 | 1674.23 | 1678.32 | 1678.07 | 1675.66 | 1676.47 | 1675.44 | 1675.22 |
| 7 | 1670.59 | 1670.73 | 1673.37 | 1672.42 | 1667.04 | 1674.38 | 1678.42 | 1677.98 | 1675.68 | 1676.34 | 1675.38 | 1675.13 |
| 8 | 1670.56 | 1671.00 | 1673.38 | 1672.28 | 1666.88 | 1674.51 | 1678.48 | 1677.87 | 1675.67 | 1676.28 | 1675.36 | 1675.07 |
| 9 | 1670.59 | 1671.52 | 1673.58 | 1672.15 | 1666.74 | 1674.61 | 1678.51 | 1677.76 | 1675.62 | 1676.17 | 1675.44 | 1675.05 |
| 10 | 1670.44 | 1671.89 | 1673.94 | 1671.97 | 1666.57 | 1674.67 | 1678.59 | 1677.64 | 1675.57 | 1676.07 | 1675.55 | 1674.98 |
| 11 | 1670.26 | 1672.23 | 1674.19 | 1671.80 | 1666.42 | 1674.72 | 1678.65 | 1677.53 | 1675.47 | 1675.95 | 1675.63 | 1675.06 |
| 12 | 1670.13 | 1672.40 | 1674.38 | 1671.62 | 1666.75 | 1674.75 | 1678.75 | 1677.47 | 1675.37 | 1675.80 | 1675.77 | 1675.09 |
| 13 | 1669.99 | 1672.52 | 1674.45 | 1671.40 | 1666.98 | 1674.78 | 1678.77 | 1677.38 | 1675.31 | 1675.67 | 1675.80 | 1675.15 |
| 14 | 1669.83 | 1672.59 | 1674.53 | 1671.23 | 1666.98 | 1674.84 | 1678.74 | 1677.33 | 1675.33 | 1675.56 | 1675.83 | 1675.18 |
| 15 | 1669.68 | 1672.66 | 1674.55 | 1671.03 | 1666.95 | 1674.84 | 1678.68 | 1677.28 | 1675.43 | 1675.44 | 1675.83 | 1675.09 |
| 16 | 1669.51 | 1672.82 | 1674.55 | 1670.84 | 1666.87 | 1674.88 | 1678.62 | 1677.25 | 1675.42 | 1675.31 | 1675.96 | 1674.99 |
| 17 | 1669.36 | 1672.81 | 1674.50 | 1670.66 | 1666.79 | 1674.90 | 1678.57 | 1677.39 | 1675.42 | 1675.16 | 1676.08 | 1674.84 |
| 18 | 1669.22 | 1672.79 | 1674.47 | 1670.46 | 1666.73 | 1674.92 | 1678.62 | 1677.50 | 1675.49 | 1675.06 | 1676.13 | 1674.75 |
| 19 | 1669.13 | 1672.76 | 1674.41 | 1670.27 | 1666.96 | 1674.93 | 1678.74 | 1677.59 | 1675.45 | 1674.91 | 1676.15 | 1674.62 |
| 20 | 1669.06 | 1672.72 | 1674.35 | 1670.06 | 1667.36 | 1674.93 | 1678.77 | 1677.54 | 1675.41 | 1674.76 | 1676.13 | 1674.48 |
| 21 | 1668.96 | 1672.67 | 1674.26 | 1669.83 | 1668.06 | 1674.93 | 1678.77 | 1677.45 | 1675.47 | 1674.84 | 1676.08 | 1674.37 |
| 22 | 1668.87 | 1672.62 | 1674.19 | 1669.63 | 1668.85 | 1674.99 | 1678.74 | 1677.37 | 1675.57 | 1675.13 | 1676.04 | 1674.33 |
| 23 | 1668.76 | 1672.55 | 1674.09 | 1669.46 | 1669.71 | 1675.06 | 1678.70 | 1677.28 | 1675.66 | 1675.27 | 1675.98 | 1674.30 |
| 24 | 1668.64 | 1672.47 | 1673.99 | 1669.28 | 1670.63 | 1675.07 | 1678.70 | 1677.17 | 1675.78 | 1675.35 | 1675.94 | 1674.71 |
| 25 | 1668.49 | 1672.52 | 1673.91 | 1669.07 | 1671.54 | 1675.07 | 1678.68 | 1677.07 | 1675.87 | 1675.33 | 1675.92 | 1675.05 |
| 26 | 1668.53 | 1672.61 | 1673.81 | 1668.88 | 1672.16 | 1675.07 | 1678.64 | 1676.96 | 1675.93 | 1675.28 | 1675.85 | 1675.23 |
| 27 | 1669.53 | 1672.69 | 1673.72 | 1668.68 | 1672.58 | 1675.08 | 1678.62 | 1676.86 | 1676.06 | 1675.27 | 1675.78 | 1675.34 |
| 28 | 1669.77 | 1672.80 | 1673.61 | 1668.48 | 1672.92 | 1675.08 | 1678.56 | 1676.75 | 1676.18 | 1675.22 | 1675.72 | 1675.45 |
| 29 | 1670.03 | 1672.88 | 1673.50 | 1668.28 | --- | 1675.15 | 1678.51 | 1676.64 | 1676.29 | 1675.35 | 1675.65 | 1675.57 |
| 30 | 1670.17 | 1673.02 | 1673.38 | 1668.08 | --- | 1675.34 | 1678.51 | 1676.52 | 1676.30 | 1675.50 | 1675.59 | 1675.62 |
| 31 | 1670.19 | --- | 1673.28 | 1667.86 | --- | 1675.93 | --- | 1676.42 | --- | 1675.63 | 1675.53 | --- |
| MEAN | 1669.86 | 1672.01 | 1673.86 | 1670.74 | 1668.11 | 1674.71 | 1678.44 | 1677.48 | 1675.72 | 1675.63 | 1675.75 | 1675.05 |
| MAX | 1671.08 | 1673.02 | 1674.55 | 1673.17 | 1672.92 | 1675.93 | 1678.77 | 1678.47 | 1676.30 | 1676.47 | 1676.15 | 1675.62 |
| MIN | 1668.49 | 1670.23 | 1673.07 | 1667.86 | 1666.42 | 1673.23 | 1676.57 | 1676.42 | 1675.31 | 1674.76 | 1675.36 | 1674.30 |
| * | 2476 | 3096 | 3128 | 1989 | 3110 | 3902 | 4477 | 3894 | 3883 | 3716 | 3678 | 3719 |
| ** | -69.4 | +239 | +11.9 | -425 | +463 | +269 | +222 | -218 | -4.24 | -62.4 | -14.2 | +15.8 |

CAL YR 1980 MEAN 1672.36 MAX 1678.15 MIN 1661.52 ** 16.5
WTR YR 1981 MEAN 1673.98 MAX 1678.77 MIN 1666.42 ** 33.5

* Contents, in millions of cubic feet, at 2400 hours on last day of month by interpolation.
** Change in contents, equivalent in cubic feet per second.

## 04257000 BEAVER RIVER BELOW STILLWATER DAM, NEAR BEAVER RIVER, NY

LOCATION.--Lat 43°53'50", long 75°03'05", Herkimer County, Hydrologic Unit 04150101, in gatehouse at Stillwater Dam, 2.5 mi (4.0 km) upstream from Moshier Creek, and 7.5 mi (12.1 km) west of Beaver River Post Office.

DRAINAGE AREA.--172 $mi^2$ (445 $km^2$).

PERIOD OF RECORD.--May 1908 to current year. Published as "at State dam, near Beaver River" prior to June 1924.

REVISED RECORDS.--WSP 714: Drainage area. WRD NY 1973: 1971.

GAGE.--Nonrecording gage read once daily and after reservoir gate changes. Datum of gage is National Geodetic Vertical Datum, adjustment of 1912. Prior to June 1, 1924, nonrecording gage at present site and datum. June 1, 1924 to Nov. 14, 1929, nonrecording gage at site 1,000 ft (305 m) downstream at same datum.

REMARKS.--Records poor. Flow regulated by Stillwater Reservoir (see station 04256500). Discharge determined from ratings for gates and spillway of Stillwater Dam applied to log of reservoir elevation and gate operation.

COOPERATION.--Records furnished by Board of Hudson River-Black River Regulating District.

AVERAGE DISCHARGE.--73 years, 379 $ft^3/s$ (10.73 $m^3/s$), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 3,700 $ft^3/s$ (105 $m^3/s$) May 3, 1926; practically no flow at times when gates in dam were closed.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 668 $ft^3/s$ (18.9 $m^3/s$) Apr. 20, 21, minimum daily, 10 $ft^3/s$ (0.283 $m^3/s$) Feb. 25-Mar. 8, Mar. 22, 29, 31, Apr. 1, 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 385 | 378 | 217 | 535 | 559 | 10 | 10 | 660 | 529 | 361 | 384 | 383 |
| 2 | 385 | 379 | 485 | 534 | 557 | 10 | 10 | 658 | 528 | 361 | 384 | 382 |
| 3 | 384 | 380 | 485 | 531 | 557 | 10 | 13 | 657 | 527 | 56 | 385 | 382 |
| 4 | 383 | 432 | 428 | 529 | 556 | 10 | 316 | 655 | 526 | 56 | 385 | 382 |
| 5 | 383 | 462 | 400 | 529 | 554 | 10 | 471 | 653 | 524 | 56 | 383 | 382 |
| 6 | 382 | 463 | 400 | 528 | 553 | 10 | 472 | 652 | 296 | 257 | 382 | 382 |
| 7 | 270 | 464 | 400 | 527 | 551 | 10 | 475 | 648 | 183 | 361 | 382 | 382 |
| 8 | 51 | 186 | 459 | 526 | 549 | 10 | 477 | 646 | 364 | 493 | 382 | 382 |
| 9 | 394 | 52 | 195 | 580 | 547 | 117 | 478 | 644 | 454 | 560 | 382 | 504 |
| 10 | 568 | 104 | 54 | 608 | 545 | 232 | 480 | 642 | 454 | 559 | 384 | 562 |
| 11 | 566 | 392 | 55 | 607 | 211 | 232 | 481 | 574 | 453 | 557 | 385 | 563 |
| 12 | 565 | 393 | 268 | 605 | 48 | 232 | 483 | 541 | 452 | 556 | 385 | 373 |
| 13 | 562 | 395 | 378 | 603 | 364 | 232 | 607 | 540 | 184 | 555 | 385 | 277 |
| 14 | 561 | 395 | 379 | 600 | 548 | 232 | 667 | 538 | 55 | 555 | 385 | 470 |
| 15 | 560 | 149 | 431 | 598 | 548 | 232 | 666 | 537 | 276 | 553 | 385 | 564 |
| 16 | 558 | 337 | 457 | 597 | 548 | 232 | 663 | 213 | 453 | 553 | 385 | 562 |
| 17 | 556 | 482 | 457 | 595 | 547 | 232 | 661 | 58 | 453 | 552 | 387 | 562 |
| 18 | 454 | 482 | 514 | 590 | 218 | 232 | 662 | 59 | 453 | 552 | 388 | 561 |
| 19 | 371 | 482 | 544 | 589 | 43 | 232 | 665 | 379 | 453 | 550 | 388 | 560 |
| 20 | 464 | 482 | 544 | 588 | 44 | 232 | 668 | 542 | 184 | 548 | 388 | 559 |
| 21 | 552 | 482 | 544 | 585 | 44 | 93 | 668 | 541 | 55 | 250 | 388 | 558 |
| 22 | 551 | 481 | 543 | 582 | 44 | 10 | 667 | 539 | 319 | 55 | 388 | 558 |
| 23 | 550 | 481 | 542 | 580 | 45 | 158 | 666 | 538 | 273 | 55 | 386 | 445 |
| 24 | 549 | 480 | 541 | 578 | 22 | 234 | 666 | 536 | 183 | 194 | 385 | 275 |
| 25 | 546 | 370 | 539 | 577 | 10 | 234 | 666 | 536 | 299 | 271 | 385 | 276 |
| 26 | 295 | 202 | 538 | 574 | 10 | 234 | 664 | 535 | 357 | 271 | 385 | 277 |
| 27 | 50 | 202 | 538 | 572 | 10 | 234 | 662 | 534 | 153 | 346 | 385 | 277 |
| 28 | 51 | 202 | 537 | 569 | 10 | 93 | 661 | 533 | 56 | 382 | 385 | 277 |
| 29 | 143 | 202 | 537 | 567 | --- | 10 | 661 | 532 | 257 | 216 | 385 | 278 |
| 30 | 378 | 203 | 536 | 565 | --- | 93 | 661 | 531 | 361 | 55 | 385 | 279 |
| 31 | 378 | --- | 535 | 562 | --- | 10 | --- | 530 | --- | 273 | 385 | --- |
| TOTAL | 12845 | 10594 | 13480 | 17710 | 8842 | 4152 | 16067 | 16381 | 10114 | 11019 | 11936 | 12674 |
| MEAN | 414 | 353 | 435 | 571 | 316 | 134 | 536 | 528 | 337 | 355 | 385 | 422 |
| MAX | 568 | 482 | 544 | 608 | 559 | 234 | 668 | 660 | 529 | 560 | 388 | 564 |
| MIN | 50 | 52 | 54 | 526 | 10 | 10 | 10 | 58 | 55 | 55 | 382 | 275 |

CAL YR 1980 TOTAL 130552 MEAN 357 MAX 707 MIN 32
WTR YR 1981 TOTAL 145814 MEAN 399 MAX 668 MIN 10

## 04258000 BEAVER RIVER AT CROGHAN, NY

LOCATION.--Lat 43°53'50", long 75°24'16", Lewis County, Hydrologic Unit 04150101, on left bank 1,200 ft (366 m) upstream from Black Creek, and 0.5 mi (0.8 km) west of Croghan.

DRAINAGE AREA.--294 mi² (761 km²).

PERIOD OF RECORD.--September 1930 to current year.

REVISED RECORDS.--WSP 759: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 806.20 ft (245.730 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Stillwater Reservoir (see station 04256500). Between Stillwater Dam and this station, flow is further regulated by several powerplant ponds. Diurnal fluctuation at low and medium flow.

AVERAGE DISCHARGE.--51 years, 594 ft³/s (16.82 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,100 ft³/s (144 m³/s) May 21, 1969, gage height, 6.98 ft (2.128 m); minimum, 11 ft³/s (0.31 m³/s) Jan. 22, 29, Feb. 4, 1967, gage height, 0.63 ft (0.192 m); minimum daily, 22 ft³/s (0.62 m³/s) July 18, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,850 ft³/s (52.4 m³/s) Oct. 27, gage height, 4.46 ft (1.359 m); minimum, 215 ft³/s (6.09 m³/s) Aug. 5, gage height, 1.96 ft (0.597 m); minimum daily, 241 ft³/s (6.82 m³/s) July 4, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 443 | 521 | 490 | 614 | 690 | 547 | 956 | 879 | 624 | 480 | 370 | 409 |
| 2 | 437 | 506 | 413 | 580 | 678 | 624 | 970 | 740 | 602 | 460 | 335 | 434 |
| 3 | 502 | 574 | 838 | 496 | 596 | 495 | 949 | 733 | 636 | 289 | 420 | 453 |
| 4 | 514 | 558 | 852 | 623 | 825 | 413 | 984 | 772 | 630 | 241 | 393 | 406 |
| 5 | 641 | 624 | 772 | 576 | 805 | 505 | 949 | 805 | 602 | 244 | 340 | 318 |
| 6 | 552 | 698 | 765 | 569 | 798 | 422 | 714 | 805 | 395 | 352 | 543 | 281 |
| 7 | 666 | 620 | 654 | 673 | 791 | 413 | 654 | 805 | 250 | 364 | 436 | 259 |
| 8 | 627 | 950 | 633 | 702 | 690 | 289 | 690 | 838 | 480 | 307 | 360 | 483 |
| 9 | 514 | 1060 | 920 | 714 | 568 | 269 | 852 | 838 | 642 | 613 | 714 | 791 |
| 10 | 531 | 1060 | 927 | 708 | 759 | 269 | 740 | 714 | 591 | 765 | 901 | 906 |
| 11 | 479 | 810 | 862 | 585 | 865 | 266 | 702 | 727 | 585 | 785 | 1190 | 999 |
| 12 | 510 | 692 | 778 | 660 | 879 | 446 | 542 | 752 | 521 | 422 | 1030 | 1070 |
| 13 | 559 | 634 | 772 | 642 | 825 | 337 | 558 | 624 | 275 | 409 | 811 | 970 |
| 14 | 624 | 733 | 658 | 613 | 619 | 279 | 740 | 746 | 247 | 307 | 785 | 845 |
| 15 | 569 | 648 | 556 | 746 | 552 | 275 | 740 | 778 | 360 | 404 | 696 | 927 |
| 16 | 588 | 529 | 564 | 811 | 563 | 427 | 740 | 818 | 558 | 574 | 670 | 949 |
| 17 | 710 | 578 | 568 | 714 | 607 | 395 | 740 | 1130 | 591 | 727 | 825 | 831 |
| 18 | 786 | 700 | 568 | 721 | 927 | 263 | 825 | 949 | 558 | 727 | 772 | 619 |
| 19 | 691 | 612 | 646 | 660 | 1150 | 256 | 845 | 831 | 395 | 708 | 778 | 495 |
| 20 | 786 | 592 | 704 | 678 | 1100 | 256 | 879 | 733 | 247 | 672 | 654 | 455 |
| 21 | 655 | 752 | 638 | 721 | 1050 | 256 | 899 | 740 | 244 | 733 | 610 | 831 |
| 22 | 811 | 668 | 643 | 913 | 1130 | 256 | 845 | 733 | 547 | 574 | 554 | 941 |
| 23 | 767 | 671 | 746 | 678 | 1330 | 259 | 825 | 436 | 893 | 678 | 407 | 999 |
| 24 | 780 | 791 | 759 | 660 | 1350 | 356 | 927 | 256 | 648 | 377 | 690 | 1140 |
| 25 | 710 | 956 | 852 | 666 | 1530 | 269 | 934 | 364 | 624 | 263 | 636 | 1170 |
| 26 | 1210 | 886 | 654 | 660 | 1260 | 263 | 920 | 690 | 733 | 241 | 498 | 1130 |
| 27 | 1430 | 765 | 721 | 920 | 1060 | 282 | 899 | 733 | 563 | 256 | 372 | 1050 |
| 28 | 1520 | 585 | 622 | 852 | 818 | 286 | 886 | 642 | 879 | 296 | 358 | 936 |
| 29 | 998 | 602 | 633 | 805 | --- | 263 | 906 | 619 | 465 | 424 | 358 | 641 |
| 30 | 754 | 585 | 636 | 785 | --- | 465 | 927 | 624 | 536 | 648 | 351 | 488 |
| 31 | 508 | --- | 759 | 772 | --- | 672 | --- | 574 | --- | 584 | 503 | --- |
| TOTAL | 21872 | 20960 | 21603 | 21517 | 24815 | 11073 | 24737 | 22428 | 15921 | 14924 | 18360 | 22226 |
| MEAN | 706 | 699 | 697 | 694 | 886 | 357 | 825 | 723 | 531 | 481 | 592 | 741 |
| MAX | 1520 | 1060 | 927 | 920 | 1530 | 672 | 984 | 1130 | 893 | 785 | 1190 | 1170 |
| MIN | 437 | 506 | 413 | 496 | 552 | 256 | 542 | 256 | 244 | 241 | 335 | 259 |

CAL YR 1980 TOTAL 202610 MEAN 554 MAX 1580 MIN 49
WTR YR 1981 TOTAL 240436 MEAN 659 MAX 1530 MIN 241

## 04260500 BLACK RIVER AT WATERTOWN, NY
(National stream-quality accounting network station)
(National pesticide network station)

LOCATION.--Lat 43°59'08", long 75°55'30", Jefferson County, Hydrologic Unit 04150101, on downstream side of right abutment of Vanduzee Street Bridge at Watertown, and 3.5 mi (5.6 km) upstream from Philomel Creek. Water-quality sampling site at discharge station.

DRAINAGE AREA.--1,876 $mi^2$ (4,859 $km^2$).

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1920 to current year.

REVISED RECORDS.--WSP 759: Drainage area. WDR NY-77-1: 1974.

GAGE.--Water-stage recorder. Datum of gage is 373.88 ft (113.959 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 3, 1921, nonrecording gage, and from Sept. 3, 1921 to Mar. 15, 1977, recording gage at same site at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Stillwater Reservoir (see station 04256500), Fulton Chain of Lakes, and other reservoirs. Extensive diurnal fluctuation at low and medium flow caused by mills and powerplants in and above Watertown. During canal season, water is diverted out of basin through Forestport feeder and Black River Canal (flowing south).

AVERAGE DISCHARGE.--61 years, 4,010 $ft^3/s$ (113.6 $m^3/s$).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,600 $ft^3/s$ (1,120 $m^3/s$) Mar. 16, 1977, gage height, 12.98 ft (3.956 m); minimum, 10 $ft^3/s$ (0.28 $m^3/s$) Sept. 2, 1934, gage height, 0.81 ft (0.247 m) present datum; minimum daily, 137 $ft^3/s$ (3.88 $m^3/s$) Sept. 4, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge known, about 39,700 $ft^3/s$ (1,120 $m^3/s$) Apr. 23, 1869 (from New York State Museum Bulletin 85).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 17,000 $ft^3/s$ (480 $m^3/s$):

| Date | Time | Discharge ($ft^3/s$) | Discharge ($m^3/s$) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|
| Feb. 23 | 2145 | 29,700 | 842 | 11.16 | 3.402 |

Minimum discharge, 136 $ft^3/s$ (3.85 $m^3/s$) July 13, gage height, 1.33 ft (0.405 m); minimum daily, 1,010 $ft^3/s$ (28.6 $m^3/s$), July 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1810 | 5760 | 5290 | 3000 | 1800 | 10900 | 7890 | 4600 | 1960 | 2830 | 4410 | 1560 |
| 2 | 1580 | 4860 | 5040 | 2800 | 1900 | 8970 | 10200 | 4430 | 2090 | 2410 | 3020 | 1580 |
| 3 | 1460 | 4350 | 7230 | 2600 | 2190 | 7460 | 12400 | 3980 | 1950 | 1810 | 2310 | 1670 |
| 4 | 1430 | 4000 | 7540 | 2400 | 3020 | 6180 | 13700 | 3610 | 1920 | 1490 | 2380 | 2200 |
| 5 | 1560 | 4180 | 6080 | 2300 | 3590 | 5110 | 12600 | 3440 | 1920 | 1360 | 2050 | 3240 |
| 6 | 1800 | 5170 | 4770 | 2200 | 3740 | 4510 | 10800 | 3150 | 1740 | 1290 | 2200 | 2950 |
| 7 | 1740 | 5910 | 4900 | 2200 | 4080 | 4020 | 9420 | 3120 | 1580 | 1240 | 2670 | 2220 |
| 8 | 1710 | 7200 | 5240 | 2300 | 4240 | 3760 | 8280 | 2980 | 1440 | 1550 | 3370 | 2200 |
| 9 | 1550 | 7830 | 8340 | 2400 | 3980 | 3500 | 7340 | 2950 | 1460 | 1570 | 3630 | 2700 |
| 10 | 1520 | 8070 | 9320 | 2500 | 3550 | 3420 | 6640 | 2700 | 1680 | 1840 | 4100 | 5240 |
| 11 | 1490 | 8040 | 8560 | 2500 | 3630 | 3320 | 6100 | 2490 | 1870 | 1660 | 5200 | 5810 |
| 12 | 1490 | 7690 | 7200 | 2400 | 4560 | 3190 | 5980 | 2620 | 1980 | 1580 | 6330 | 5880 |
| 13 | 2120 | 6980 | 6050 | 2300 | 5690 | 3260 | 5690 | 3390 | 1840 | 1260 | 5740 | 5670 |
| 14 | 2120 | 6230 | 5080 | 2300 | 5740 | 3050 | 5620 | 4280 | 1580 | 1140 | 5040 | 4950 |
| 15 | 2160 | 5710 | 4620 | 2300 | 5710 | 2880 | 5520 | 4470 | 1420 | 1010 | 4410 | 4300 |
| 16 | 1880 | 5060 | 4620 | 2200 | 5710 | 2860 | 5760 | 5520 | 1710 | 1050 | 4100 | 3800 |
| 17 | 1850 | 4390 | 4600 | 2100 | 6150 | 3240 | 5790 | 7140 | 2150 | 1300 | 5170 | 3460 |
| 18 | 1630 | 3860 | 4160 | 2000 | 7090 | 2760 | 6280 | 7010 | 2630 | 1450 | 5310 | 3000 |
| 19 | 2280 | 3550 | 3630 | 1900 | 9090 | 2550 | 7030 | 6330 | 2600 | 1370 | 4790 | 3740 |
| 20 | 2380 | 3570 | 3980 | 1600 | 11400 | 2410 | 7430 | 5240 | 2150 | 1360 | 3960 | 4470 |
| 21 | 2520 | 3190 | 4040 | 1800 | 14000 | 2280 | 7720 | 4260 | 1720 | 1840 | 3080 | 4120 |
| 22 | 3320 | 3320 | 3780 | 1800 | 16900 | 2260 | 7260 | 3570 | 1740 | 4710 | 2620 | 3900 |
| 23 | 3650 | 3240 | 3410 | 1900 | 26300 | 2230 | 6150 | 3120 | 2400 | 5110 | 2100 | 6130 |
| 24 | 3260 | 3410 | 3120 | 1800 | 28100 | 2290 | 5670 | 2460 | 2880 | 4450 | 1960 | 8160 |
| 25 | 3170 | 4300 | 3240 | 1700 | 26100 | 2650 | 5520 | 2130 | 2590 | 3000 | 2060 | 8900 |
| 26 | 6790 | 5500 | 3480 | 1700 | 23100 | 2570 | 5640 | 2400 | 2540 | 2320 | 2160 | 9650 |
| 27 | 11000 | 5170 | 3190 | 1700 | 18400 | 2810 | 5360 | 2410 | 3260 | 1660 | 1850 | 9610 |
| 28 | 10700 | 4750 | 3020 | 1800 | 13900 | 3070 | 4860 | 2260 | 3960 | 1870 | 1720 | 8620 |
| 29 | 10500 | 5290 | 2680 | 2000 | --- | 3300 | 4330 | 2090 | 3710 | 2680 | 1500 | 7460 |
| 30 | 9250 | 5410 | 2850 | 2000 | --- | 4100 | 4330 | 2130 | 2730 | 4560 | 1490 | 6610 |
| 31 | 7400 | --- | 3300 | 1900 | --- | 6430 | --- | 2000 | --- | 5020 | 1410 | --- |
| TOTAL | 107120 | 155990 | 152360 | 66600 | 263660 | 121340 | 217310 | 112280 | 65200 | 67790 | 102140 | 143800 |
| MEAN | 3455 | 5200 | 4915 | 2148 | 9416 | 3914 | 7244 | 3622 | 2173 | 2187 | 3295 | 4793 |
| MAX | 11000 | 8070 | 9320 | 3000 | 28100 | 10900 | 13700 | 7140 | 3960 | 5110 | 6330 | 9650 |
| MIN | 1430 | 3190 | 2680 | 1700 | 1800 | 2230 | 4330 | 2000 | 1420 | 1010 | 1410 | 1560 |

CAL YR 1980 TOTAL 1390679 MEAN 3800 MAX 21000 MIN 970
WTR YR 1981 TOTAL 1575590 MEAN 4317 MAX 28100 MIN 1010

## 04260500 BLACK RIVER AT WATERTOWN, NY--Continued

### WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956-60, 1962 to current year.
CHEMICAL DATA: 1956 (e), 1959 (a), 1960 (b), 1965 (a), 1966-81 (d).
MINOR ELEMENTS DATA: 1970-71 (a), 1974-79 (b), 1980 (c), 1981 (b).
PESTICIDE DATA: 1975-79 (b), 1980-81 (a).
ORGANIC DATA: OC--1973 (c), 1974 (a), 1975 (c), 1976-77 (b), 1978-81 (d).
PCB--1978-79 (b), 1980-81 (a).
NUTRIENT DATA: 1968 (b), 1969-81 (d).
BIOLOGICAL DATA:
Bacteria--1973-81 (d).
Phytoplankton--1975-77 (d), 1978-79 (c), 1980 (b), 1981 (c).
Periphyton--1975-80 (b).
SEDIMENT DATA: 1975-76 (d), 1977 (c), 1978-81 (d).

COOPERATION.--Pesticide samples were collected by the U.S. Geological Survey and were analyzed by the U.S. Environmental Protection Agency.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1955 to September 1959, July 1962 to March 1969.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS (CFS) | SPE-CIFIC CON-DUCT-ANCE (UMHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | TUR-BID-ITY (NTU) | BARO-METRIC PRES-SURE (MM OF HG) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) | STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) | HARD-NESS (MG/L AS CACO3) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 21... | 0915 | 2520 | 96 | 7.2 | 10.0 | .90 | -- | 10.4 | 93 | 270 | 23 | 38 |
| NOV 19... | 1015 | 3650 | 93 | 7.6 | 1.0 | .40 | 760 | 14.2 | 100 | 160 | 26 | 38 |
| DEC 16... | 0830 | 4600 | 106 | 7.3 | .5 | .60 | 750 | 14.2 | 100 | 520 | K15 | 40 |
| JAN 20... | 1000 | 2200 | 102 | 7.4 | 1.5 | .80 | 760 | 13.8 | 99 | 180 | 22 | 35 |
| FEB 17... | 1315 | 6200 | 89 | 7.2 | .5 | .40 | 760 | 15.3 | 109 | 220 | 230 | 38 |
| MAR 17... | 0900 | 2810 | 102 | 7.3 | 2.0 | .80 | 737 | 12.7 | 98 | 270 | 20 | 44 |
| APR 21... | 0830 | 7780 | 69 | 7.4 | 6.0 | 1.0 | 760 | 11.2 | 93 | 410 | 28 | 23 |
| MAY 20... | 0830 | 5450 | 80 | 7.2 | 9.0 | 2.0 | 760 | 10.4 | 93 | 130 | K14 | 31 |
| JUN 16... | 0900 | 2860 | 120 | 6.8 | 21.0 | 2.1 | 750 | 6.3 | 73 | 420 | 140 | 41 |
| JUL 29... | 0815 | 2540 | 81 | 6.4 | 20.0 | 2.0 | 750 | 8.8 | 100 | 500 | 920 | 32 |
| AUG 25... | 0930 | 1850 | 92 | 6.6 | 20.0 | .70 | 760 | 8.2 | 90 | 1400 | 160 | 33 |
| SEP 23... | 1100 | 6100 | 80 | 6.5 | 13.5 | 3.3 | 755 | 10.6 | 103 | 510 | 1500 | 32 |

| DATE | HARD-NESS NONCAR-BONATE (MG/L AS CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | ALKA-LINITY LAB (MG/L AS CACO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 21... | 12 | 13 | 1.4 | 3.6 | .9 | 26 | 11 | 2.1 | .1 | 5.5 | 66 |
| NOV 19... | 11 | 13 | 1.3 | 2.6 | .8 | 27 | 11 | 2.4 | .1 | 6.3 | 66 |
| DEC 16... | 16 | 14 | 1.3 | 2.7 | .7 | 24 | 11 | 2.5 | .1 | 6.2 | 67 |
| JAN 20... | 15 | 12 | 1.3 | 5.2 | .7 | 20 | 14 | 3.2 | .1 | 8.3 | 66 |
| FEB 17... | 13 | 14 | .7 | 3.0 | 1.0 | 25 | 9.3 | 3.4 | <.1 | 5.7 | 76 |
| MAR 17... | 11 | 15 | 1.6 | 3.5 | .9 | 33 | 10 | 2.9 | .1 | 7.6 | 74 |
| APR 21... | 7.0 | 6.1 | 1.8 | 1.3 | .5 | 16 | 7.1 | 1.5 | <.1 | 5.1 | 51 |
| MAY 20... | 7.0 | 11 | .9 | 2.3 | .7 | 24 | 9.1 | 1.8 | .1 | 4.5 | 46 |
| JUN 16... | 10 | 14 | 1.4 | 4.3 | .8 | 31 | 11 | 2.3 | .1 | 5.9 | 60 |
| JUL 29... | 9.0 | 11 | 1.1 | 3.5 | .7 | 23 | 10 | 2.1 | .1 | 5.6 | 60 |
| AUG 25... | 7.0 | 12 | .6 | 3.3 | .7 | 26 | 10 | 2.6 | .1 | 5.2 | 70 |
| SEP 23... | 7.0 | 11 | 1.2 | 2.7 | .4 | 25 | 9.0 | 1.8 | .1 | 5.2 | 63 |

K Results based on colony count outside the acceptable range (non-ideal colony count).

## 04260500 BLACK RIVER AT WATERTOWN, NY--Continued

### WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) | NITROGEN, NO2+NO3 TOTAL (MG/L AS N) | NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) | NITROGEN, AMMONIA TOTAL (MG/L AS N) | NITROGEN, AMMONIA DISSOLVED (MG/L AS N) | NITROGEN, ORGANIC TOTAL (MG/L AS N) | NITROGEN, ORGANIC DISSOLVED (MG/L AS N) | NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) | NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N) | NITROGEN, TOTAL (MG/L AS N) | NITROGEN DISSOLVED (MG/L AS N) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 21... | 54 | .22 | .21 | .030 | .050 | .26 | .25 | .29 | .30 | .51 | .51 |
| NOV 19... | 56 | .43 | .44 | .020 | .040 | .27 | .19 | .29 | .23 | .72 | .67 |
| DEC 16... | 56 | .76 | .76 | .040 | .050 | .46 | .38 | .50 | .43 | 1.3 | 1.2 |
| JAN 20... | 59 | .53 | .53 | .090 | .110 | .19 | .20 | .28 | .31 | .81 | .84 |
| FEB 17... | 56 | .87 | .85 | .100 | .110 | .39 | .32 | .49 | .43 | 1.4 | 1.3 |
| MAR 17... | 64 | .65 | .66 | .050 | .090 | .15 | .14 | .20 | .23 | .85 | .89 |
| APR 21... | 34 | .19 | .19 | .040 | .050 | .35 | .32 | .39 | .37 | .58 | .56 |
| MAY 20... | 46 | .33 | .33 | .060 | .060 | .43 | .23 | .49 | .29 | .82 | .62 |
| JUN 16... | 60 | .39 | .38 | .080 | .070 | .46 | .33 | .54 | .40 | .93 | .78 |
| JUL 29... | 49 | .22 | .18 | .010 | .050 | .49 | .31 | .50 | .36 | .72 | .54 |
| AUG 25... | 52 | .24 | .25 | .040 | .030 | .51 | .37 | .55 | .40 | .79 | .65 |
| SEP 23... | 47 | .23 | .21 | .050 | .050 | .50 | .34 | .55 | .39 | .78 | .60 |

| DATE | PHOSPHORUS, TOTAL (MG/L AS P) | PHOSPHORUS, DISSOLVED (MG/L AS P) | ARSENIC TOTAL (UG/L AS AS) | ARSENIC DISSOLVED (UG/L AS AS) | BARIUM, TOTAL RECOVERABLE (UG/L AS BA) | BARIUM, DISSOLVED (UG/L AS BA) | CADMIUM TOTAL RECOVERABLE (UG/L AS CD) | CADMIUM DISSOLVED (UG/L AS CD) | CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) | CHROMIUM, DISSOLVED (UG/L AS CR) | COBALT, TOTAL RECOVERABLE (UG/L AS CO) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 21... | .020 | .020 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV 19... | .030 | .020 | 1 | 1 | 100 | 20 | 1 | 0 | 30 | 20 | 2 |
| DEC 16... | .020 | .010 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN 20... | .020 | .010 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB 17... | .040 | <.010 | 0 | 0 | <50 | 0 | 1 | 1 | 20 | 10 | 1 |
| MAR 17... | .030 | <.010 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| APR 21... | .020 | .010 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAY 20... | .060 | <.010 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUN 16... | <.010 | <.010 | 1 | 1 | 100 | 20 | 1 | 4 | 10 | 10 | 5 |
| JUL 29... | .030 | .040 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG 25... | .030 | .010 | 2 | 1 | 100 | 100 | 1 | 1 | 10 | <10 | 2 |
| SEP 23... | .030 | .020 | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | COBALT, DISSOLVED (UG/L AS CO) | COPPER, TOTAL RECOVERABLE (UG/L AS CU) | COPPER, DISSOLVED (UG/L AS CU) | IRON, TOTAL RECOVERABLE (UG/L AS FE) | IRON, DISSOLVED (UG/L AS FE) | LEAD, TOTAL RECOVERABLE (UG/L AS PB) | LEAD, DISSOLVED (UG/L AS PB) | MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) | MANGANESE, DISSOLVED (UG/L AS MN) | MERCURY TOTAL RECOVERABLE (UG/L AS HG) | MERCURY DISSOLVED (UG/L AS HG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| NOV 19... | 1 | 5 | 2 | 280 | 140 | 11 | 1 | 30 | 30 | .2 | <.1 |
| FEB 17... | 0 | 8 | 5 | 360 | 100 | 27 | 6 | 90 | 40 | .1 | <.1 |
| JUN 16... | 0 | 2 | 0 | 410 | 170 | 2 | 0 | 80 | 8 | .3 | .2 |
| AUG 25... | 2 | 3 | 2 | 620 | 320 | 7 | 3 | 50 | 20 | <.1 | .4 |

## 04260500 BLACK RIVER AT WATERTOWN, NY--Continued

### WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) | NICKEL, DIS-SOLVED (UG/L AS NI) | SELE-NIUM, TOTAL (UG/L AS SE) | SELE-NIUM, DIS-SOLVED (UG/L AS SE) | SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) | SILVER, DIS-SOLVED (UG/L AS AG) | ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) | ZINC, DIS-SOLVED (UG/L AS ZN) | CARBON, ORGANIC TOTAL (MG/L AS C) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) | CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT<br>21... | -- | -- | -- | -- | -- | -- | -- | -- | 5.6 | -- | -- |
| NOV<br>19... | 8 | 0 | 0 | 0 | 0 | 0 | 20 | 10 | -- | 6.8 | .4 |
| DEC<br>16... | -- | -- | -- | -- | -- | -- | -- | -- | 5.3 | -- | -- |
| JAN<br>20... | -- | -- | -- | -- | -- | -- | -- | -- | 4.7 | -- | -- |
| FEB<br>17... | 4 | 1 | 0 | 0 | 0 | 0 | 30 | 30 | -- | 11 | -- |
| MAR<br>17... | -- | -- | -- | -- | -- | -- | -- | -- | 4.8 | -- | -- |
| APR<br>21... | -- | -- | -- | -- | -- | -- | -- | -- | 5.2 | -- | -- |
| MAY<br>20... | -- | -- | -- | -- | -- | -- | -- | -- | 7.7 | -- | -- |
| JUN<br>16... | 6 | 1 | 0 | 0 | 0 | 0 | 20 | 10 | -- | 4.5 | .4 |
| JUL<br>29... | -- | -- | -- | -- | -- | -- | -- | -- | 8.4 | -- | -- |
| AUG<br>25... | 3 | 1 | <1 | <1 | 3 | 6 | 10 | 10 | -- | 6.6 | -- |
| SEP<br>23... | -- | -- | -- | -- | -- | -- | -- | -- | 5.6 | -- | -- |

### PESTICIDE ANALYSES, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | PCB, TOTAL (UG/L) | ALDRIN, TOTAL (UG/L) | CHLOR-DANE, TOTAL (UG/L) | DDD, TOTAL (UG/L) | DDE, TOTAL (UG/L) | DDT, TOTAL (UG/L) | DI-AZINON, TOTAL (UG/L) | DI-ELDRIN TOTAL (UG/L) | ENDRIN, TOTAL (UG/L) | ETHION, TOTAL (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| NOV<br>19... | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |

| DATE | HEPTA-CHLOR, TOTAL (UG/L) | HEPTA-CHLOR EPOXIDE TOTAL (UG/L) | LINDANE TOTAL (UG/L) | MALA-THION, TOTAL (UG/L) | METH-OXY-CHLOR, TOTAL (UG/L) | METHYL PARA-THION, TOTAL (UG/L) | METHYL TRI-THION, TOTAL (UG/L) | PARA-THION, TOTAL (UG/L) | TOX-APHENE, TOTAL (UG/L) | TOTAL TRI-THION (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| NOV<br>19... | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |

ND Material specifically analyzed for, but not detected.

### SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS (CFS) | SEDI-MENT, SUS-PENDED (MG/L) | SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) |
|---|---|---|---|---|
| OCT<br>21... | 0915 | 2520 | 3 | 20 |
| NOV<br>19... | 1015 | 3650 | 2 | 20 |
| DEC<br>16... | 0830 | 4600 | 3 | 37 |
| JAN<br>20... | 1000 | 2200 | 1 | 5.9 |
| FEB<br>17... | 1315 | 6200 | 9 | 151 |
| MAR<br>17... | 0900 | 2810 | 5 | 38 |
| APR<br>21... | 0830 | 7780 | 9 | 189 |
| MAY<br>20... | 0830 | 5450 | 7 | 103 |
| JUN<br>16... | 0900 | 2860 | 6 | 46 |
| JUL<br>29... | 0815 | 2540 | 7 | 48 |
| AUG<br>25... | 0930 | 1850 | 5 | 25 |
| SEP<br>23... | 1100 | 6100 | 8 | 132 |

## 04260500 BLACK RIVER AT WATERTOWN, NY--Continued

## QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

### PHYTOPLANKTON

| DATE | NOV 19,80 | MAR 17,81 | MAY 20,81 | JUN 16,81 |
|---|---|---|---|---|
| TIME | 1015 | 0900 | 0830 | 0900 |
| TOTAL CELLS/ML | 540 | 64 | 1200 | 1700 |
| DIVERSITY: DIVISION | 0.2 | 0.7 | 1.6 | 1.6 |
| .CLASS | 0.2 | 0.7 | 1.6 | 1.6 |
| ..ORDER | 0.2 | 0.7 | 2.3 | 1.9 |
| ...FAMILY | 0.9 | 0.7 | 2.9 | 2.3 |
| ....GENUS | 0.9 | 0.7 | 2.9 | 2.6 |

| ORGANISM | CELLS /ML | PER-CENT | CELLS /ML | PER-CENT | CELLS /ML | PER-CENT | CELLS /ML | PER-CENT |
|---|---|---|---|---|---|---|---|---|
| CHLOROPHYTA (GREEN ALGAE) | | | | | | | | |
| .CHLOROPHYCEAE | | | | | | | | |
| ..CHLOROCOCCALES | | | | | | | | |
| ...HYDRODICTYACEAE | | | | | | | | |
| ...OOCYSTACEAE | | | | | | | | |
| ....ANKISTRODESMUS | -- | - | -- | - | 56 | 5 | -- | - |
| ....QUADRIGULA | -- | - | -- | - | -- | - | 210 | 12 |
| ....SELENASTRUM | -- | - | -- | - | -- | - | 26 | 2 |
| ...SCENEDESMACEAE | | | | | | | | |
| ....CRUCIGENIA | -- | - | -- | - | -- | - | 460# | 27 |
| ....TETRASTRUM | -- | - | -- | - | -- | - | 100 | 6 |
| ..TETRASPORALES | | | | | | | | |
| ...PALMELLACEAE | | | | | | | | |
| ....SPHAEROCYSTIS | -- | - | -- | - | -- | - | 100 | 6 |
| ..VOLVOCALES | | | | | | | | |
| ...CHLAMYDOMONADACEAE | | | | | | | | |
| ....CHLAMYDOMONAS | -- | - | -- | - | 98 | 8 | -- | - |
| CHRYSOPHYTA | | | | | | | | |
| .BACILLARIOPHYCEAE | | | | | | | | |
| ..CENTRALES | | | | | | | | |
| ...COSCINODISCACEAE | | | | | | | | |
| ....CYCLOTELLA | 13 | 2 | -- | - | 42 | 4 | 340# | 20 |
| ..PENNALES | | | | | | | | |
| ...ACHNANTHACEAE | | | | | | | | |
| ....ACHNANTHES | -- | - | -- | - | 70 | 6 | -- | - |
| ...CYMBELLACEAE | | | | | | | | |
| ....CYMBELLA | -- | - | -- | - | 42 | 4 | 13 | 1 |
| ...FRAGILARIACEAE | | | | | | | | |
| ....SYNEDRA | -- | - | -- | - | 70 | 6 | -- | - |
| ...NAVICULACEAE | | | | | | | | |
| ....NAVICULA | -- | - | -- | - | 14 | 1 | -- | - |
| ...NITZSCHIACEAE | | | | | | | | |
| ....NITZSCHIA | -- | - | -- | - | 56 | 5 | -- | - |
| ...SURIRELLACEAE | | | | | | | | |
| ....SURIRELLA | -- | - | -- | - | 14 | 1 | -- | - |
| ...TABELLARIACEAE | | | | | | | | |
| ....TABELLARIA | -- | - | 52# | 80 | -- | - | -- | - |
| .CHRYSOPHYCEAE | | | | | | | | |
| ..CHRYSOMONADALES | | | | | | | | |
| ...OCHROMONADACEAE | | | | | | | | |
| ....OCHROMONAS | -- | - | -- | - | -- | - | 13 | 1 |
| CRYPTOPHYTA (CRYPTOMONADS) | | | | | | | | |
| .CRYPTOPHYCEAE | | | | | | | | |
| ..CRYPTOMONADALES | | | | | | | | |
| ...CRYPTOCHRYSIDACEAE | | | | | | | | |
| ....CHROOMONAS | -- | - | -- | - | 28 | 2 | 13 | 1 |
| ...CRYPTOMONADACEAE | | | | | | | | |
| ....CRYPTOMONAS | -- | - | 13# | 20 | -- | - | -- | - |
| CYANOPHYTA (BLUE-GREEN ALGAE) | | | | | | | | |
| .CYANOPHYCEAE | | | | | | | | |
| ..CHROOCOCCALES | | | | | | | | |
| ...CHROOCOCCACEAE | | | | | | | | |
| ....ANACYSTIS | -- | - | -- | - | 480# | 41 | 410# | 24 |
| ..HORMOGONALES | | | | | | | | |
| ...NOSTOCACEAE | | | | | | | | |
| ....ANABAENOPSIS | 120# | 21 | -- | - | -- | - | -- | - |
| ...OSCILLATORIACEAE | | | | | | | | |
| ....OSCILLATORIA | 410# | 76 | -- | - | 180# | 16 | -- | - |
| EUGLENOPHYTA (EUGLENOIDS) | | | | | | | | |
| .EUGLENOPHYCEAE | | | | | | | | |
| ..EUGLENALES | | | | | | | | |
| ...EUGLENACEAE | | | | | | | | |
| ....EUGLENA | -- | - | -- | - | 14 | 1 | 13 | 1 |

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

## 04260500 BLACK RIVER AT WATERTOWN, NY--Continued

### QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

### PHYTOPLANKTON

| | | | |
|---|---|---|---|
| DATE | JUL 29,81 | AUG 25,81 | SEP 23,81 |
| TIME | 0815 | 0930 | 1100 |
| TOTAL CELLS/ML | 810 | 1100 | 420 |
| DIVERSITY: DIVISION | 1.3 | 1.1 | 1.0 |
| .CLASS | 1.4 | 1.1 | 1.0 |
| ..ORDER | 1.8 | 1.4 | 1.5 |
| ...FAMILY | 2.8 | 1.8 | 1.8 |
| ....GENUS | 3.1 | 2.7 | 1.8 |

| ORGANISM | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT |
|---|---|---|---|---|---|---|
| CHLOROPHYTA (GREEN ALGAE) | | | | | | |
| .CHLOROPHYCEAE | | | | | | |
| ..CHLOROCOCCALES | | | | | | |
| ...HYDRODICTYACEAE | | | | | | |
| ....PEDIASTRUM | 110 | 14 | -- | - | -- | - |
| ...OOCYSTACEAE | | | | | | |
| ....ANKISTRODESMUS | 140# | 17 | 41 | 4 | -- | - |
| ....DICTYOSPHAERIUM | 14 | 2 | -- | - | -- | - |
| ....GLOEOACTINIUM | -- | - | 28 | 2 | -- | - |
| ....KIRCHNERIELLA | -- | - | 14 | 1 | -- | - |
| ....OOCYSTIS | -- | - | 69 | 6 | -- | - |
| ....QUADRIGULA | -- | - | -- | - | -- | - |
| ....SELENASTRUM | -- | - | 170 | 15 | -- | - |
| ...SCENEDESMACEAE | | | | | | |
| ....CRUCIGENIA | 110 | 14 | -- | - | -- | - |
| ....SCENEDESMUS | 110 | 14 | 120 | 11 | -- | - |
| ....TETRASTRUM | -- | - | -- | - | -- | - |
| ..TETRASPORALES | | | | | | |
| ...PALMELLACEAE | | | | | | |
| ....SPHAEROCYSTIS | -- | - | -- | - | -- | - |
| ..VOLVOCALES | | | | | | |
| ...CHLAMYDOMONADACEAE | | | | | | |
| ....CHLAMYDOMONAS | 28 | 3 | 14 | 1 | -- | - |
| CHRYSOPHYTA | | | | | | |
| .BACILLARIOPHYCEAE | | | | | | |
| ..CENTRALES | | | | | | |
| ...COSCINODISCACEAE | | | | | | |
| ....CYCLOTELLA | 84 | 10 | -- | - | 68# | 16 |
| ..PENNALES | | | | | | |
| ...ACHNANTHACEAE | | | | | | |
| ....ACHNANTHES | 14 | 2 | -- | - | -- | - |
| ....COCCONEIS | -- | - | -- | - | 41 | 10 |
| ...CYMBELLACEAE | | | | | | |
| ....CYMBELLA | -- | - | -- | - | -- | - |
| ...FRAGILARIACEAE | | | | | | |
| ....SYNEDRA | -- | - | -- | - | -- | - |
| ...NAVICULACEAE | | | | | | |
| ....NAVICULA | 14 | 2 | 14 | 1 | 120# | 29 |
| ...NITZSCHIACEAE | | | | | | |
| ....NITZSCHIA | 28 | 3 | 14 | 1 | -- | - |
| ...SURIRELLACEAE | | | | | | |
| ....SURIRELLA | -- | - | -- | - | -- | - |
| ...TABELLARIACEAE | | | | | | |
| ....TABELLARIA | -- | - | -- | - | -- | - |
| .CHRYSOPHYCEAE | | | | | | |
| ..CHRYSOMONADALES | | | | | | |
| ...OCHROMONADACEAE | | | | | | |
| ....DINOBRYON | 14 | 2 | -- | - | -- | - |
| ....OCHROMONAS | -- | - | -- | - | -- | - |
| CYANOPHYTA (BLUE-GREEN ALGAE) | | | | | | |
| .CYANOPHYCEAE | | | | | | |
| ..CHROOCOCCALES | | | | | | |
| ...CHROOCOCCACEAE | | | | | | |
| ....ANACYSTIS | 140# | 17 | 110 | 10 | -- | - |
| ....COCCOCHLORIS | -- | - | 470# | 42 | -- | - |
| ..HORMOGONALES | | | | | | |
| ...NOSTOCACEAE | | | | | | |
| ....ANABAENOPSIS | -- | - | -- | - | -- | - |
| ...OSCILLATORIACEAE | | | | | | |
| ....OSCILLATORIA | -- | - | 41 | 4 | 190# | 45 |

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

## LAKES AND RESERVOIRS IN STREAMS TRIBUTARY TO LAKE ONTARIO

04253300 SIXTH LAKE.--Lat 43°44'43", long 74°46'58", Hamilton County, Hydrologic Unit 04150101, on dam at outlet of Sixth Lake at Inlet, and 11.2 mi (18.0 km) upstream from dam at Old Forge. DRAINAGE AREA, 18.6 mi$^2$ (48.2 km$^2$). PERIOD OF RECORD, November 1911 to current year. GAGE, nonrecording gage read daily at 0800. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Hudson River-Black River Regulating District).

The Sixth and Seventh Lakes of Fulton Chain Lakes are partially formed and controlled by the concrete dam at Inlet, while the Eighth Lake is upstream and at approximately 5 ft (1.5 m) higher elevation. Storage began around 1881. The present structure is a concrete dam with control gates which were installed in 1938. Usable capacity 296.6 mil ft$^3$ (8.40 hm$^3$) between minimum operating level, elevation 1,755.1 ft (541.05 m) and crest of spillway, elevation 1,786.0 ft (544.37 m); no dead storage below minimum operating level. Figures given herein represent total contents. The dam is operated, records collected, furnished, and stored by Board of Hudson River-Black River Regulating District.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 332 mil ft$^3$ (9.4 hm$^3$) Oct. 3, 1945, elevation, 1,787.1 ft (544.71 m); minimum observed, less than 900,000 ft$^3$ (25,500 m$^3$) Nov. 18, 1943, water level below elevation 1,775.6 ft (541.20 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 303.0 mil ft$^3$ (8.6 hm$^3$) Apr. 2, elevation, 1786.20 ft (544.434 m); minimum observed, 162.2 mil ft$^3$ (4.59 hm$^3$) Feb. 7, 8, 9, 10, elevation, 1,781.70 ft (543.062 m).

04253400 FIRST LAKE (formerly published as "Old Forge Reservoir").--Lat 43°42'44", long 74°58'12", Herkimer County, Hydrologic Unit 04150101, at dam on Middle Branch Moose River, and 100 ft (30 m) downstream from bridge on State Highway 28 at Old Forge, 11.2 mi (18.0 km) downstream from dam on Sixth Lake outlet at Inlet. DRAINAGE AREA, 52.1 mi$^2$ (135 km$^2$). PERIOD OF RECORD, November 1911 to current year. GAGE, nonrecording gage read daily at 0800. Datum of gage is 1,700.15 ft (518.206 m) National Geodetic Vertical Datum of 1929 (levels by Board of Hudson River-Black River Regulating District).

The First through Fifth Lakes of Fulton Chain Lakes are partially formed and controlled by a concrete dam with 12-inch flashboards. Storage began around 1881 or 1882 with a wooden crib dam. This dam was replaced with a concrete dam in 1905 and gates were installed in 1927. Usable capacity with flashboards, 895.6 mil ft$^3$ (25.36 hm$^3$), gage height, 6.89 ft (2.100 m). Usable capacity without flashboards, 764.3 mil ft$^3$ (21.64 hm$^3$), gage height, 5.91 ft (1.801 m); no dead storage below minimum operating level. Figures given herein represent total contents. The dam is operated, records collected, furnished, and stored by Board of Hudson River-Black River Regulating District.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 1,019 mil ft$^3$ (28.85 hm$^3$) June 17, 1972, gage height, 7.78 ft (2.371 m); minimum observed, 6,500,000 ft$^3$ (184,000 m$^3$) Nov. 3, 1939, gage height, -0.35 ft (-0.107 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 921.2 mil ft$^3$ (26.09 hm$^3$) Sept. 24, gage height, 7.08 ft (2.158 m); minimum observed, 409.2 mil ft$^3$ (11.59 hm$^3$) Feb. 1, gage height, 3.14 ft (0.957 m).

04256500 STILLWATER RESERVOIR NEAR BEAVER RIVER, NY (see station for daily elevation, skeleton capacity table, monthly contents, and change in contents).

MONTHEND ELEVATION, GAGE HEIGHT, AND CONTENTS, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| | *Elevation (feet) | Contents (million ft$^3$) | Change in contents (equivalent in ft$^3$/s) | *Gage height (feet) | Contents (million ft$^3$) | Change in contents (equivalent in ft$^3$/s) |
|---|---|---|---|---|---|---|
| | 04253300 Sixth Lake | | | 04253400 First Lake | | |
| Sept. 30................ | 1,784.23 | 240.4 | | 5.84 | 755.2 | |
| Oct. 31................ | 1,784.22 | 240.1 | - 0.11 | 6.33 | 819.9 | + 24.2 |
| Nov. 30................ | 1,784.58 | 251.4 | + 4.36 | 5.31 | 686.3 | - 51.5 |
| Dec. 31................ | 1,784.02 | 233.9 | - 6.53 | 3.81 | 493.2 | - 72.1 |
| CAL YR 1980 | | | + 0.44 | | | - 5.65 |
| Jan. 31................ | 1,781.87 | 167.5 | -24.8 | 3.15 | 410.5 | - 30.9 |
| Feb. 28................ | 1,785.35 | 275.8 | +44.8 | 5.86 | 757.8 | +143.6 |
| Mar. 31................ | 1,785.88 | 292.8 | + 6.35 | 5.63 | 727.9 | - 11.2 |
| Apr. 30................ | 1,785.43 | 278.4 | - 5.56 | 6.55 | 849.5 | + 46.9 |
| May 31................ | 1,785.68 | 286.4 | + 2.99 | 6.89 | 895.6 | + 17.2 |
| June 30................ | 1,785.52 | 281.2 | - 2.01 | 6.19 | 800.7 | - 36.6 |
| July 31................ | 1,785.67 | 286.0 | + 1.79 | 6.91 | 898.3 | + 36.4 |
| Aug. 31................ | 1,785.15 | 269.4 | - 6.20 | 6.89 | 895.6 | - 1.01 |
| Sept. 30................ | 1,785.13 | 268.8 | - 0.23 | 6.83 | 887.2 | - 3.24 |
| WTR YR 1981 | | | + 0.90 | | | + 4.19 |

* Elevations or gage heights at 2400 hours, by interpolation.

## 04261000 OSWEGATCHIE RIVER AT CRANBERRY LAKE, NY

LOCATION.--Lat 44°13'15", long 74°51'00", St. Lawrence County, Hydrologic Unit 04150302, on right bank 900 ft (274 m) downstream from dam at outlet of Cranberry Lake, at village of Cranberry Lake.

DRAINAGE AREA.--140 mi$^2$ (363 km$^2$).

PERIOD OF RECORD.--May 1923 to current year. Prior to October 1958, published as "East Branch Oswegatchie River at Cranberry Lake."

REVISED RECORDS.--WRD NY-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,458.23 ft (444.468 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1938, nonrecording gage at site 80 ft (24 m) upstream at same datum.

REMARKS.--Records good. Since 1867, flow regulated by Cranberry Lake.

AVERAGE DISCHARGE.--58 years, 293 ft$^3$/s (8.298 m$^3$/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,940 ft$^3$/s (54.9 m$^3$/s) May 13, 1943, gage height, 7.70 ft (2.347 m); minimum daily, 3 ft$^3$/s (0.085 m$^3$/s) Apr. 9-16, 1931.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 944 ft$^3$/s (26.7 m$^3$/s) Nov. 12; minimum daily, 147 ft$^3$/s (4.16 m$^3$/s) Apr. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 157 | 475 | 709 | 389 | 151 | 850 | 151 | 293 | 196 | 518 | 172 | 364 |
| 2 | 157 | 470 | 700 | 385 | 153 | 835 | 147 | 290 | 196 | 448 | 174 | 346 |
| 3 | 157 | 466 | 700 | 385 | 154 | 814 | 148 | 290 | 196 | 212 | 174 | 284 |
| 4 | 156 | 461 | 613 | 381 | 154 | 798 | 150 | 290 | 196 | 178 | 186 | 281 |
| 5 | 156 | 461 | 420 | 377 | 154 | 778 | 151 | 290 | 198 | 378 | 233 | 281 |
| 6 | 156 | 466 | 415 | 373 | 156 | 758 | 151 | 252 | 198 | 744 | 266 | 281 |
| 7 | 155 | 470 | 415 | 308 | 156 | 658 | 151 | 202 | 200 | 776 | 266 | 281 |
| 8 | 155 | 480 | 420 | 190 | 156 | 538 | 153 | 202 | 200 | 389 | 266 | 281 |
| 9 | 154 | 491 | 433 | 190 | 156 | 530 | 153 | 202 | 198 | 202 | 266 | 281 |
| 10 | 154 | 667 | 447 | 190 | 156 | 522 | 153 | 202 | 312 | 202 | 284 | 300 |
| 11 | 153 | 856 | 456 | 190 | 157 | 514 | 153 | 202 | 349 | 202 | 374 | 339 |
| 12 | 203 | 944 | 466 | 190 | 172 | 503 | 153 | 205 | 346 | 182 | 461 | 416 |
| 13 | 228 | 927 | 470 | 190 | 206 | 495 | 153 | 255 | 346 | 170 | 527 | 504 |
| 14 | 228 | 910 | 475 | 188 | 206 | 491 | 153 | 353 | 346 | 170 | 527 | 504 |
| 15 | 228 | 888 | 470 | 187 | 206 | 484 | 153 | 353 | 346 | 170 | 577 | 504 |
| 16 | 228 | 872 | 466 | 185 | 308 | 420 | 154 | 432 | 346 | 170 | 659 | 500 |
| 17 | 228 | 850 | 461 | 185 | 428 | 308 | 154 | 522 | 349 | 170 | 681 | 461 |
| 18 | 228 | 835 | 456 | 185 | 415 | 308 | 198 | 522 | 367 | 170 | 677 | 360 |
| 19 | 228 | 819 | 451 | 183 | 420 | 304 | 255 | 522 | 428 | 170 | 613 | 360 |
| 20 | 225 | 798 | 447 | 183 | 510 | 304 | 433 | 522 | 428 | 170 | 457 | 360 |
| 21 | 225 | 783 | 442 | 171 | 653 | 301 | 567 | 522 | 432 | 170 | 452 | 360 |
| 22 | 225 | 768 | 438 | 154 | 676 | 297 | 593 | 482 | 457 | 170 | 452 | 360 |
| 23 | 225 | 758 | 428 | 154 | 700 | 297 | 593 | 371 | 518 | 170 | 452 | 360 |
| 24 | 222 | 748 | 420 | 153 | 738 | 294 | 593 | 371 | 518 | 170 | 452 | 408 |
| 25 | 222 | 743 | 420 | 153 | 803 | 294 | 593 | 371 | 495 | 170 | 448 | 513 |
| 26 | 258 | 738 | 415 | 153 | 872 | 290 | 527 | 329 | 452 | 170 | 428 | 593 |
| 27 | 315 | 728 | 411 | 153 | 872 | 290 | 465 | 198 | 452 | 170 | 367 | 721 |
| 28 | 319 | 728 | 402 | 151 | 861 | 290 | 465 | 198 | 452 | 170 | 367 | 762 |
| 29 | 322 | 728 | 394 | 153 | --- | 231 | 465 | 196 | 474 | 172 | 367 | 757 |
| 30 | 389 | 719 | 394 | 153 | --- | 159 | 428 | 198 | 522 | 172 | 367 | 725 |
| 31 | 451 | --- | 394 | 151 | --- | 161 | --- | 196 | --- | 172 | 364 | --- |
| TOTAL | 6907 | 21047 | 14448 | 6733 | 10749 | 14116 | 8756 | 9833 | 10513 | 7667 | 12356 | 12847 |
| MEAN | 223 | 702 | 466 | 217 | 384 | 455 | 292 | 317 | 350 | 247 | 399 | 428 |
| MAX | 451 | 944 | 709 | 389 | 872 | 850 | 593 | 522 | 522 | 776 | 681 | 762 |
| MIN | 153 | 461 | 394 | 151 | 151 | 159 | 147 | 196 | 196 | 170 | 172 | 281 |

CAL YR 1980 TOTAL 98103 MEAN 268 MAX 944 MIN 120
WTR YR 1981 TOTAL 135972 MEAN 373 MAX 944 MIN 147

## 04262500 WEST BRANCH OSWEGATCHIE RIVER NEAR HARRISVILLE, NY

LOCATION.--Lat 44°11'08", long 75°19'52", St. Lawrence County, Hydrologic Unit 04150302, on right bank just downstream from highway bridge, 0.5 mi (0.8 km) northeast of Geers Corners, 1.5 mi (2.4 km) downstream from Big Creek, and 4.0 mi (6.4 km) downstream from Harrisville.

DRAINAGE AREA.--258 mi² (668 km²).

PERIOD OF RECORD.--July 1916 to current year.

REVISED RECORDS.--WSP 759: Drainage area. WSP 784: 1934.

GAGE.--Water-stage recorder. Datum of gage is 738.51 ft (225.098 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 30, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good except for winter periods, which are fair.

AVERAGE DISCHARGE.--65 years, 513 ft³/s (14.53 m³/s), 27.00 in/yr (686 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,080 ft³/s (200 m³/s) Mar. 15, 1977, gage height, 9.31 ft (2.838 m); maximum gage height, 9.6 ft (2.93 m) Jan. 9, 1930; minimum discharge, 25 ft³/s (0.71 m³/s) Sept. 1, 1934, gage height, 0.86 ft (0.262 m).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,300 ft³/s (93 m³/s):

| Date | Time | Discharge (ft³/s) | Discharge (m³/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|
| Feb. 22 | 0500 | 4,000 | 113 | a7.35 | 2.240 |

a Ice jam.

Minimum discharge, 153 ft³/s (4.33 m³/s) Feb. 2, gage height, 1.96 ft (0.597 m), but may have been less during period of ice effect in January.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 313 | 765 | 862 | 287 | 162 | 1080 | 1850 | 715 | 287 | 1020 | 610 | 223 |
| 2 | 271 | 616 | 815 | 270 | 191 | 962 | 2150 | 642 | 262 | 815 | 445 | 228 |
| 3 | 254 | 539 | 1130 | 260 | 293 | 854 | 2230 | 553 | 222 | 604 | 360 | 239 |
| 4 | 248 | 463 | 1710 | 250 | 381 | 696 | 1840 | 479 | 204 | 424 | 298 | 249 |
| 5 | 243 | 534 | 2270 | 230 | 470 | 651 | 1430 | 425 | 226 | 327 | 277 | 245 |
| 6 | 244 | 766 | 2300 | 220 | 477 | 566 | 1200 | 393 | 245 | 287 | 437 | 229 |
| 7 | 226 | 907 | 2270 | 210 | 422 | 536 | 1010 | 383 | 273 | 295 | 460 | 211 |
| 8 | 208 | 1120 | 1350 | 200 | 367 | 484 | 851 | 362 | 294 | 248 | 411 | 195 |
| 9 | 188 | 1570 | 1510 | 190 | 332 | 468 | 718 | 334 | 332 | 235 | 513 | 237 |
| 10 | 188 | 1730 | 2340 | 190 | 307 | 451 | 742 | 307 | 481 | 242 | 696 | 450 |
| 11 | 178 | 1660 | 1830 | 180 | 366 | 432 | 784 | 299 | 447 | 263 | 796 | 779 |
| 12 | 180 | 1450 | 1530 | 180 | 636 | 415 | 798 | 343 | 358 | 222 | 1250 | 1100 |
| 13 | 321 | 1170 | 1150 | 180 | 879 | 400 | 766 | 435 | 302 | 189 | 1710 | 997 |
| 14 | 393 | 955 | 1000 | 170 | 1000 | 387 | 680 | 448 | 285 | 252 | 1390 | 793 |
| 15 | 357 | 892 | 1050 | 170 | 988 | 368 | 658 | 444 | 451 | 404 | 1110 | 639 |
| 16 | 318 | 845 | 827 | 170 | 878 | 417 | 624 | 699 | 685 | 375 | 1260 | 506 |
| 17 | 285 | 698 | 732 | 170 | 833 | 410 | 562 | 1100 | 662 | 280 | 1730 | 413 |
| 18 | 278 | 604 | 635 | 160 | 913 | 390 | 671 | 1330 | 669 | 222 | 1530 | 415 |
| 19 | 281 | 531 | 497 | 160 | 1180 | 369 | 1120 | 1180 | 607 | 197 | 1170 | 423 |
| 20 | 310 | 484 | 501 | 160 | 2060 | 361 | 1360 | 916 | 481 | 189 | 834 | 382 |
| 21 | 304 | 444 | 441 | 160 | 3530 | 337 | 1170 | 704 | 506 | 222 | 602 | 352 |
| 22 | 293 | 414 | 385 | 160 | 3900 | 319 | 944 | 559 | 614 | 448 | 468 | 402 |
| 23 | 295 | 397 | 371 | 160 | 3500 | 324 | 798 | 472 | 1010 | 519 | 377 | 739 |
| 24 | 285 | 403 | 368 | 160 | 3300 | 348 | 738 | 383 | 1650 | 449 | 321 | 1310 |
| 25 | 277 | 658 | 344 | 160 | 3000 | 380 | 804 | 324 | 1440 | 355 | 311 | 2090 |
| 26 | 573 | 908 | 327 | 165 | 2420 | 413 | 913 | 314 | 1110 | 282 | 284 | 1860 |
| 27 | 1450 | 945 | 322 | 183 | 1800 | 485 | 933 | 299 | 1090 | 245 | 253 | 1440 |
| 28 | 2080 | 818 | 308 | 199 | 1340 | 579 | 842 | 320 | 1150 | 233 | 229 | 1140 |
| 29 | 1820 | 877 | 309 | 197 | --- | 619 | 729 | 351 | 973 | 482 | 222 | 974 |
| 30 | 1400 | 918 | 314 | 179 | --- | 759 | 718 | 300 | 803 | 836 | 231 | 827 |
| 31 | 1010 | --- | 303 | 170 | --- | 1140 | --- | 296 | --- | 836 | 233 | --- |
| TOTAL | 15071 | 25081 | 30101 | 5900 | 35925 | 16400 | 30633 | 16109 | 18119 | 11997 | 20818 | 20087 |
| MEAN | 486 | 836 | 971 | 190 | 1283 | 529 | 1021 | 520 | 604 | 387 | 672 | 670 |
| MAX | 2080 | 1730 | 2340 | 287 | 3900 | 1140 | 2230 | 1330 | 1650 | 1020 | 1730 | 2090 |
| MIN | 178 | 397 | 303 | 160 | 162 | 319 | 562 | 296 | 204 | 189 | 222 | 195 |
| CFSM | 1.88 | 3.24 | 3.76 | .74 | 4.97 | 2.05 | 3.96 | 2.02 | 2.34 | 1.50 | 2.61 | 2.60 |
| IN. | 2.17 | 3.62 | 4.34 | .85 | 5.18 | 2.36 | 4.42 | 2.32 | 2.61 | 1.73 | 3.00 | 2.90 |

CAL YR 1980 TOTAL 180540 MEAN 493 MAX 3130 MIN 82 CFSM 1.91 IN 26.03
WTR YR 1981 TOTAL 246241 MEAN 675 MAX 3900 MIN 160 CFSM 2.62 IN 35.50

## 04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY
(National stream-quality accounting network station)

LOCATION.--Lat 44°35'58", long 75°22'45", St. Lawrence County, Hydrologic Unit 04150302, on right bank 1.5 mi (2.4 km) downstream from Beaver Creek, and 2.5 mi (4.0 km) upstream from Heuvelton. Water-quality sampling site at discharge station except for the collection of once daily specific conductance and water temperature data which is collected at powerhouse 2.6 mi (4.2 km) downstream lat 44°37'02", long 75°24'18".

DRAINAGE AREA.--973 mi² (2,520 km²).

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1916 to current year.

REVISED RECORDS.--WSP 759: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 288.85 ft (88.041 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 16, 1916, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor. Since 1867, seasonal flow regulated by Cranberry Lake; slight diurnal fluctuation at low flow and medium flow caused by powerplants. During high stages on Grass River, part of flow of that stream may pass through Upper Lake, Indian Creek and Lower Lake and enter Oswegatchie River at Rensselaer Falls, 4.5 mi (7.2 km) above station. In October 1973, a dike was installed on Indian Creek to prevent overflow of Grass River during high flows.

AVERAGE DISCHARGE.--65 years, 1,720 ft³/s (48.71 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,600 ft³/s (555 m³/s) Apr. 6, 1960, gage height, 10.36 ft (3.158 m); minimum recorded, 130 ft³/s (3.68 m³/s) Aug. 17, 1949, gage height, 0.47 ft (0.143 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,510 ft³/s (269 m³/s) Feb. 24, gage height, 6.85 ft (2.088 m); minimum, 470 ft³/s (13.3 m³/s) Oct. 9, gage height, 1.16 ft (0.354 m).

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1130 | 3040 | 3610 | 1200 | 735 | 5510 | 3010 | 2190 | 1050 | 2020 | 1600 | 847 |
| 2 | 928 | 2500 | 3640 | 1200 | 891 | 4490 | 3750 | 2050 | 906 | 3070 | 1370 | 962 |
| 3 | 830 | 2040 | 4510 | 1100 | 1410 | 3860 | 4150 | 1870 | 982 | 2990 | 1110 | 876 |
| 4 | 790 | 1990 | 5230 | 1100 | 1660 | 3390 | 4160 | 1660 | 882 | 2320 | 878 | 1000 |
| 5 | 723 | 1850 | 4670 | 1000 | 1770 | 2850 | 3990 | 1460 | 852 | 1700 | 793 | 1040 |
| 6 | 673 | 1810 | 4200 | 960 | 1650 | 2680 | 3510 | 1360 | 820 | 1220 | 676 | 972 |
| 7 | 753 | 2400 | 3560 | 920 | 1580 | 2330 | 2920 | 1260 | 653 | 948 | 1050 | 1050 |
| 8 | 705 | 3810 | 3700 | 880 | 1570 | 2020 | 2360 | 1200 | 775 | 837 | 1210 | 948 |
| 9 | 510 | 4640 | 6050 | 840 | 1480 | 2110 | 2210 | 1190 | 1080 | 798 | 1660 | 823 |
| 10 | 577 | 4910 | 7090 | 800 | 1280 | 2090 | 2020 | 1130 | 1220 | 842 | 2820 | 997 |
| 11 | 633 | 4930 | 7230 | 760 | 2130 | 2010 | 2000 | 977 | 1420 | 871 | 2950 | 2550 |
| 12 | 817 | 4730 | 5990 | 700 | 5450 | 1900 | 2010 | 869 | 1460 | 956 | 2910 | 3930 |
| 13 | 706 | 4270 | 4910 | 680 | 5950 | 1890 | 1900 | 1050 | 1260 | 718 | 3550 | 3920 |
| 14 | 671 | 4010 | 3700 | 660 | 5210 | 1810 | 1840 | 1270 | 1110 | 620 | 3920 | 3320 |
| 15 | 943 | 3770 | 3000 | 640 | 4290 | 1760 | 1820 | 1400 | 940 | 912 | 3970 | 2750 |
| 16 | 1010 | 3570 | 2700 | 620 | 3580 | 1710 | 1760 | 1850 | 954 | 1240 | 4080 | 2520 |
| 17 | 834 | 3220 | 2300 | 600 | 3970 | 1790 | 1750 | 2940 | 1540 | 1160 | 4540 | 2140 |
| 18 | 884 | 2840 | 2100 | 600 | 5000 | 1780 | 1720 | 3630 | 1750 | 855 | 4850 | 1890 |
| 19 | 796 | 2700 | 2000 | 600 | 5400 | 1690 | 2140 | 3610 | 1580 | 723 | 4530 | 1770 |
| 20 | 781 | 2510 | 1900 | 600 | 6200 | 1650 | 2650 | 3200 | 1460 | 629 | 3640 | 1700 |
| 21 | 835 | 2260 | 1800 | 600 | 7130 | 1580 | 2890 | 2690 | 1230 | 606 | 2840 | 1530 |
| 22 | 858 | 2150 | 1700 | 600 | 7520 | 1330 | 2850 | 2180 | 1260 | 654 | 2120 | 1470 |
| 23 | 1010 | 2130 | 1600 | 580 | 8100 | 1290 | 2530 | 1900 | 1510 | 807 | 1550 | 2120 |
| 24 | 1030 | 2210 | 1500 | 580 | 9080 | 1340 | 2390 | 1620 | 2210 | 1090 | 1300 | 3570 |
| 25 | 995 | 2720 | 1500 | 600 | 9150 | 1300 | 2670 | 1410 | 2960 | 957 | 1250 | 4670 |
| 26 | 1760 | 3330 | 1400 | 620 | 8770 | 1490 | 2970 | 1230 | 2920 | 870 | 1270 | 5090 |
| 27 | 2870 | 3320 | 1400 | 680 | 8250 | 1540 | 2980 | 922 | 2460 | 702 | 1420 | 5060 |
| 28 | 3730 | 3150 | 1300 | 740 | 6820 | 1590 | 2820 | 1040 | 2310 | 589 | 1110 | 4730 |
| 29 | 4280 | 3230 | 1300 | 840 | --- | 1690 | 2480 | 1030 | 2300 | 653 | 1070 | 4470 |
| 30 | 4300 | 3480 | 1300 | 820 | --- | 1750 | 2320 | 1040 | 2110 | 852 | 1090 | 3890 |
| 31 | 3760 | --- | 1200 | 780 | --- | 2230 | --- | 950 | --- | 1510 | 953 | --- |
| TOTAL | 41122 | 93520 | 98090 | 23900 | 126026 | 66450 | 78570 | 52178 | 43964 | 34719 | 68080 | 72605 |
| MEAN | 1327 | 3117 | 3164 | 771 | 4501 | 2144 | 2619 | 1683 | 1465 | 1120 | 2196 | 2420 |
| MAX | 4300 | 4930 | 7230 | 1200 | 9150 | 5510 | 4160 | 3630 | 2960 | 3070 | 4850 | 5090 |
| MIN | 510 | 1810 | 1200 | 580 | 735 | 1290 | 1720 | 869 | 653 | 589 | 676 | 823 |

CAL YR 1980 TOTAL 613126 MEAN 1675 MAX 7230 MIN 327
WTR YR 1981 TOTAL 799224 MEAN 2190 MAX 9150 MIN 510

## 04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY--Continued

### WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960, 1966-69, 1971-72, 1978 to current year.
CHEMICAL DATA: 1960 (a), 1966 (b), 1968-69 (d), 1971-72 (a), 1978 (c), 1979-80 (d), 1981 (c).
MINOR ELEMENTS DATA: 1978-79 (b), 1980 (c), 1981 (b).
ORGANIC DATA: OC--1978 (c), 1979-80 (d), 1981 (c).
NUTRIENT DATA: 1978 (c), 1979-80 (d), 1981 (c).
BIOLOGICAL DATA:
Bacteria--1978 (c), 1979-80 (d), 1981 (c)
Phytoplankton--1978-80 (c), 1981 (b).
Periphyton--1978-80 (b).
SEDIMENT DATA: 1978 (c), 1979-80 (d), 1981 (c).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1978 to September 1981 (discontinued).
WATER TEMPERATURES: January 1978 to September 1981 (discontinued).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 155 micromhos Jan. 31, 1981; minimum daily, 22 micromhos sometime in February 1980.
WATER TEMPERATURES: Maximum daily, 28.0°C July 28, 1978 and July 23-28, 1979; minimum daily, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 155 micromhos Jan. 31; minimum daily, 60 micromhos June 29, 30.
WATER TEMPERATURES: Maximum daily, 26.0°C July 7-14, 16, 22; minimum daily, freezing point on many days in December to February.

### WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS (CFS) | SPE-CIFIC CON-DUCT-ANCE (UMHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | TUR-BID-ITY (NTU) | BARO-METRIC PRES-SURE (MM OF HG) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) | STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) | HARD-NESS (MG/L AS CACO3) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NOV 12... | 1315 | 4700 | 82 | 7.4 | 3.0 | 2.5 | 760 | 12.6 | 93 | K12 | 45 | 36 |
| JAN 14... | 1300 | 660 | 118 | 7.2 | .5 | 1.0 | 760 | 12.2 | 85 | 120 | K15 | 47 |
| MAR 02... | 1300 | 4470 | 74 | 6.3 | 1.5 | .90 | 750 | 11.7 | 86 | K1200 | K18 | 31 |
| MAY 12... | 1200 | 856 | 106 | 7.3 | 15.0 | 2.0 | 750 | 8.8 | 92 | K30 | 29 | 42 |
| JUL 08... | 1000 | 856 | 62 | 6.3 | 25.0 | 1.5 | 755 | 6.3 | 78 | K17 | 63 | 30 |
| SEP 02... | 1000 | 975 | 83 | 6.5 | 21.5 | 1.1 | 755 | 6.9 | 79 | K12 | 160 | 33 |

| DATE | HARD-NESS NONCAR-BONATE (MG/L AS CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | ALKA-LINITY LAB (MG/L AS CACO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| NOV 12... | 14 | 9.6 | 2.8 | 1.8 | .9 | 22 | 9.8 | 2.1 | .1 | 6.2 | 67 |
| JAN 14... | 19 | 13 | 3.5 | 2.8 | 1.4 | 28 | 14 | 3.0 | .1 | 8.6 | 78 |
| MAR 02... | 8.0 | 8.1 | 2.6 | 1.9 | 1.0 | 23 | 8.3 | 2.3 | .1 | 4.7 | 66 |
| MAY 12... | 15 | 12 | 3.0 | 2.5 | .6 | 27 | 12 | 2.4 | .2 | 4.1 | 55 |
| JUL 08... | 9.0 | 8.8 | 2.0 | 2.0 | .5 | 21 | 9.7 | 2.8 | .1 | 5.4 | 62 |
| SEP 02... | 9.0 | 10 | 2.0 | 2.4 | .5 | 24 | 12 | 2.5 | .1 | 5.9 | 64 |

K Results based on colony count outside the acceptable range (non-ideal colony count).

## 04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY--Continued

### WATER-QUALITY RECORDS

| DATE | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) | NITRO-GEN, ORGANIC TOTAL (MG/L AS N) | NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) | NITRO-GEN, TOTAL (MG/L AS N) | NITRO-GEN DIS-SOLVED (MG/L AS N) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| NOV 12... | 47 | .19 | .19 | .080 | .090 | .15 | .14 | .23 | .23 | .42 | .42 |
| JAN 14... | 65 | .30 | .33 | .120 | .170 | .16 | .12 | .28 | .29 | .58 | .62 |
| MAR 02... | 45 | .38 | .39 | .070 | .080 | .40 | .12 | .47 | .20 | .85 | .59 |
| MAY 12... | 54 | .25 | .25 | .050 | .100 | .45 | .44 | .50 | .54 | .75 | .79 |
| JUL 08... | 45 | .20 | .19 | .020 | .030 | .46 | .44 | .48 | .47 | .68 | .66 |
| SEP 02... | 52 | .27 | .29 | .040 | .030 | .37 | .31 | .41 | .34 | .68 | .63 |

| DATE | PHOS-PHORUS, TOTAL (MG/L AS P) | PHOS-PHORUS, DIS-SOLVED (MG/L AS P) | ARSENIC TOTAL (UG/L AS AS) | ARSENIC DIS-SOLVED (UG/L AS AS) | BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) | BARIUM, DIS-SOLVED (UG/L AS BA) | CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) | CADMIUM DIS-SOLVED (UG/L AS CD) | CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) | CHRO-MIUM, DIS-SOLVED (UG/L AS CR) | COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| NOV 12... | .030 | .010 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN 14... | .040 | .020 | 1 | 0 | 100 | 30 | 0 | 2 | 20 | 10 | 0 |
| MAR 02... | .020 | .010 | 0 | 0 | 100 | 0 | 0 | 0 | 20 | 10 | 2 |
| MAY 12... | .020 | .020 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUL 08... | <.010 | .010 | 1 | 1 | 100 | 30 | 1 | 1 | 10 | <10 | 1 |
| SEP 02... | .020 | .010 | 2 | 1 | 100 | 100 | <1 | 2 | 10 | <10 | <1 |

| DATE | COBALT, DIS-SOLVED (UG/L AS CO) | COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) | COPPER, DIS-SOLVED (UG/L AS CU) | IRON, TOTAL RECOV-ERABLE (UG/L AS FE) | IRON, DIS-SOLVED (UG/L AS FE) | LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) | LEAD, DIS-SOLVED (UG/L AS PB) | MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) | MERCURY DIS-SOLVED (UG/L AS HG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| NOV 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN 14... | 0 | 2 | 0 | 500 | 340 | 0 | 4 | 30 | 40 | .1 | <.1 |
| MAR 02... | 2 | 2 | 1 | 310 | 110 | 5 | 2 | 40 | 30 | .1 | <.1 |
| MAY 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUL 08... | 1 | 2 | 3 | 480 | 370 | 10 | 3 | 50 | 50 | .2 | <.1 |
| SEP 02... | <1 | 4 | 2 | 520 | 430 | 2 | 2 | 40 | 40 | .1 | <.1 |

| DATE | NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) | NICKEL, DIS-SOLVED (UG/L AS NI) | SELE-NIUM, TOTAL (UG/L AS SE) | SELE-NIUM, DIS-SOLVED (UG/L AS SE) | SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) | SILVER, DIS-SOLVED (UG/L AS AG) | ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) | ZINC, DIS-SOLVED (UG/L AS ZN) | CARBON, ORGANIC TOTAL (MG/L AS C) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) | CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| NOV 12... | -- | -- | -- | -- | -- | -- | -- | -- | 8.7 | -- | -- |
| JAN 14... | 4 | 0 | 0 | 0 | 0 | 0 | 30 | 20 | -- | 5.4 | -- |
| MAR 02... | 2 | 0 | 0 | 0 | 0 | 0 | 40 | 10 | -- | 6.5 | .5 |
| MAY 12... | -- | -- | -- | -- | -- | -- | -- | -- | 6.9 | -- | -- |
| JUL 08... | 1 | 3 | 0 | 0 | 0 | 0 | 30 | 10 | -- | 11 | -- |
| SEP 02... | 5 | 2 | <1 | <1 | <1 | <1 | 30 | 20 | -- | 6.6 | -- |

## 04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY--Continued

### QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR, OCTOBER 1980 TO SEPTEMBER 1981

### PHYTOPLANKTON

| DATE | NOV 12,80 | MAR 2,81 | MAY 12,81 | JUL 8,81 | SEP 2,81 |
|---|---|---|---|---|---|
| TIME | 1315 | 1300 | 1200 | 1000 | 1000 |
| TOTAL CELLS/ML | 39 | 39 | 620 | 39 | 220 |
| DIVERSITY: DIVISION | 0.9 | 0.9 | 0.2 | 0.9 | 1.0 |
| .CLASS | 0.9 | 0.9 | 0.2 | 0.9 | 1.0 |
| ..ORDER | 0.9 | 0.9 | 0.3 | 0.9 | 1.4 |
| ...FAMILY | 0.9 | 0.9 | 0.3 | 0.9 | 1.7 |
| ....GENUS | 0.9 | 0.9 | 0.3 | 0.9 | 1.9 |

| ORGANISM | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT |
|---|---|---|---|---|---|---|---|---|---|---|
| CHLOROPHYTA (GREEN ALGAE) | | | | | | | | | | |
| .CHLOROPHYCEAE | | | | | | | | | | |
| ..CHLOROCOCCALES | | | | | | | | | | |
| ...SCENEDESMACEAE | | | | | | | | | | |
| ....SCENEDESMUS | — | - | — | - | — | - | — | - | 120# | 53 |
| ..VOLVOCALES | | | | | | | | | | |
| ...CHLAMYDOMONADACEAE | | | | | | | | | | |
| ....CHLAMYDOMONAS | — | - | 26# | 67 | — | - | — | - | — | - |
| CHRYSOPHYTA | | | | | | | | | | |
| .BACILLARIOPHYCEAE | | | | | | | | | | |
| ..CENTRALES | | | | | | | | | | |
| ...CHAETOCERACEAE | | | | | | | | | | |
| ....CHAETOCEROS | — | - | — | - | 13 | 2 | — | - | — | - |
| ...COSCINODISCACEAE | | | | | | | | | | |
| ....CYCLOTELLA | — | - | — | - | — | - | 13# | 33 | 29 | 13 |
| ..PENNALES | | | | | | | | | | |
| ...ACHNANTHACEAE | | | | | | | | | | |
| ....ACHNANTHES | — | - | — | - | — | - | — | - | 14 | 7 |
| ....COCCONEIS | — | - | — | - | — | - | — | - | 29 | 13 |
| ...GOMPHONEMATACEAE | | | | | | | | | | |
| ....GOMPHONEMA | — | - | 13# | 33 | — | - | — | - | — | - |
| ...NITZSCHIACEAE | | | | | | | | | | |
| ....NITZSCHIA | 26# | 67 | — | - | 13 | 2 | — | - | 29 | 13 |
| CRYPTOPHYTA (CRYPTOMONADS) | | | | | | | | | | |
| .CRYPTOPHYCEAE | | | | | | | | | | |
| ..CRYPTOMONADALES | | | | | | | | | | |
| ...CRYPTOMONADACEAE | | | | | | | | | | |
| ....CRYPTOMONAS | 13# | 33 | — | - | — | - | — | - | — | - |
| CYANOPHYTA (BLUE-GREEN ALGAE) | | | | | | | | | | |
| .CYANOPHYCEAE | | | | | | | | | | |
| ..CHROOCOCCALES | | | | | | | | | | |
| ...CHROOCOCCACEAE | | | | | | | | | | |
| ....ANACYSTIS | — | - | — | - | — | - | 26# | 67 | — | - |
| ..HORMOGONALES | | | | | | | | | | |
| ...OSCILLATORIACEAE | | | | | | | | | | |
| ....OSCILLATORIA | — | - | — | - | 590# | 96 | — | - | — | - |

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

### SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS (CFS) | SEDI-MENT, SUS-PENDED (MG/L) | SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) | DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS (CFS) | SEDI-MENT, SUS-PENDED (MG/L) | SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) |
|---|---|---|---|---|---|---|---|---|---|
| NOV 12... | 1315 | 4700 | 8 | 102 | MAY 12... | 1200 | 856 | 2 | 4.6 |
| JAN 14... | 1300 | 660 | 1 | 1.8 | JUL 08... | 1000 | 856 | 3 | 6.9 |
| MAR 02... | 1300 | 4470 | 7 | 84 | SEP 02... | 1000 | 975 | 1 | 2.6 |

### 04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY--Continued

### SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
ONCE-DAILY

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 106 | --- | 97 | 112 | 147 | 88 | --- | 100 | 100 | 62 | 84 | 94 |
| 2 | 108 | 82 | 100 | 111 | 143 | 85 | --- | 98 | 103 | 61 | 82 | 90 |
| 3 | 96 | 89 | 98 | 110 | 142 | 85 | --- | 99 | 103 | 68 | 84 | 95 |
| 4 | 96 | 88 | 100 | 109 | 150 | 85 | --- | 100 | 103 | 68 | 78 | 97 |
| 5 | 98 | 91 | 98 | 109 | 148 | 82 | --- | 100 | 101 | 70 | 70 | 95 |
| 6 | 95 | 90 | 98 | 112 | 140 | 82 | --- | 100 | 132 | 70 | 76 | 94 |
| 7 | 104 | 110 | 99 | 115 | 133 | 82 | --- | 99 | 132 | 72 | 64 | 95 |
| 8 | 104 | 114 | 95 | 114 | 132 | 82 | --- | 105 | 136 | 82 | 75 | 96 |
| 9 | 102 | 110 | 96 | 108 | 132 | 83 | --- | 105 | 122 | 80 | 67 | 94 |
| 10 | 102 | 91 | 97 | 107 | 107 | 90 | --- | 105 | 112 | 79 | 75 | 92 |
| 11 | 116 | 82 | 92 | 109 | 106 | 93 | --- | 100 | 108 | 80 | 87 | 92 |
| 12 | 116 | 83 | 103 | 109 | 107 | 95 | --- | 110 | 116 | 84 | 79 | 91 |
| 13 | 116 | 84 | 105 | 115 | 118 | 97 | 106 | 110 | 95 | 98 | 71 | 93 |
| 14 | 116 | 84 | 103 | 108 | 120 | 95 | 108 | 115 | 95 | 96 | 62 | 92 |
| 15 | 116 | 86 | 104 | 120 | 123 | 96 | 108 | 110 | 96 | 106 | 68 | 87 |
| 16 | 116 | 88 | 103 | 120 | 115 | 97 | 106 | 120 | 93 | 102 | 63 | 84 |
| 17 | 112 | 88 | 101 | 122 | 118 | 98 | 116 | 120 | 97 | 94 | 70 | 83 |
| 18 | --- | 77 | 102 | 121 | 117 | 99 | 116 | 120 | 104 | 92 | 89 | 85 |
| 19 | 110 | 85 | 103 | 118 | 109 | 99 | 118 | 90 | 107 | 99 | 76 | 85 |
| 20 | 110 | 86 | 102 | 122 | 110 | 99 | 116 | 92 | 99 | 102 | 79 | 86 |
| 21 | 102 | 88 | 103 | 125 | 101 | 97 | 116 | 89 | 84 | 104 | 80 | 92 |
| 22 | 104 | 86 | 104 | 126 | 76 | 97 | 103 | 90 | 85 | 97 | 79 | 97 |
| 23 | 104 | 112 | 103 | 134 | 75 | 108 | 91 | 89 | 85 | 94 | 81 | 98 |
| 24 | 122 | 110 | 104 | 136 | 68 | 110 | 87 | 89 | 96 | 93 | 82 | 95 |
| 25 | 122 | 104 | 107 | 134 | 69 | 112 | 108 | 89 | 74 | 90 | 84 | 98 |
| 26 | 122 | 106 | 104 | 132 | 69 | 111 | 108 | 91 | 67 | 92 | 86 | 75 |
| 27 | 122 | 104 | 102 | 132 | 71 | 113 | 106 | 93 | 67 | 91 | 86 | 73 |
| 28 | 87 | 90 | 104 | 138 | 70 | 110 | 106 | 93 | 60 | 85 | 86 | 80 |
| 29 | 86 | 96 | 104 | 137 | --- | 100 | 100 | 100 | 60 | 85 | 87 | 80 |
| 30 | 87 | 95 | 105 | 152 | --- | 100 | 100 | 96 | 69 | 86 | 87 | 93 |
| 31 | 89 | --- | 102 | 155 | --- | --- | --- | 100 | --- | 86 | 88 | --- |
| MEAN | 106 | 93 | 101 | 122 | 111 | 96 | 107 | 101 | 97 | 86 | 78 | 90 |

### TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
ONCE-DAILY

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.0 | 5.0 | 2.0 | .0 | .0 | 2.0 | --- | 12.5 | 20.0 | 22.0 | 24.0 | 23.0 |
| 2 | 14.0 | 5.0 | 1.0 | .0 | .0 | 2.0 | --- | 13.0 | 21.0 | 22.5 | 24.0 | 23.0 |
| 3 | 13.0 | 5.0 | 1.0 | .0 | .0 | 2.5 | --- | 14.0 | 21.0 | 23.0 | 23.0 | 23.0 |
| 4 | 13.0 | 5.0 | 1.0 | .0 | .0 | 2.0 | --- | 15.0 | 21.0 | 23.0 | 23.0 | 22.5 |
| 5 | 13.0 | 5.0 | 2.0 | .0 | .0 | 2.5 | --- | 15.0 | 21.0 | 24.5 | 23.5 | 22.0 |
| 6 | 13.0 | 5.0 | 2.0 | .0 | .0 | 3.0 | --- | 16.0 | 22.0 | 24.0 | 24.0 | 21.5 |
| 7 | 13.0 | 5.0 | 2.0 | .0 | .5 | 3.0 | --- | 16.0 | 22.0 | 26.0 | 24.0 | 21.0 |
| 8 | 13.0 | 5.0 | 3.0 | .0 | 1.0 | 3.0 | --- | 16.0 | 22.0 | 26.0 | 24.0 | 20.5 |
| 9 | 12.0 | 4.5 | 2.0 | .0 | 1.5 | 3.0 | --- | 16.0 | 22.0 | 26.0 | 24.0 | 20.0 |
| 10 | 12.0 | 4.0 | 1.0 | .0 | 2.0 | 3.5 | --- | 15.5 | 22.0 | 26.0 | 24.0 | 19.0 |
| 11 | 12.0 | 4.0 | 1.5 | .0 | 2.0 | 3.5 | --- | 15.5 | 22.0 | 26.0 | 23.0 | 18.0 |
| 12 | 12.0 | 4.0 | 1.0 | .0 | 1.5 | 4.0 | --- | 15.0 | 22.0 | 26.0 | 22.0 | 18.0 |
| 13 | 11.0 | 4.0 | 1.0 | .0 | 2.0 | 4.0 | 11.0 | 14.0 | 22.0 | 26.0 | 22.0 | 18.0 |
| 14 | 11.0 | 3.5 | 1.0 | .0 | 2.0 | 4.0 | 11.0 | 14.0 | 22.0 | 26.0 | 22.0 | 18.0 |
| 15 | 11.0 | 3.0 | .5 | .0 | 2.0 | 4.0 | 10.0 | 15.0 | 22.0 | 24.5 | 22.0 | 17.5 |
| 16 | 11.0 | 3.0 | .5 | .0 | 2.0 | 4.0 | 10.0 | 15.0 | 22.0 | 26.0 | 22.0 | 17.0 |
| 17 | 11.0 | 3.0 | .5 | .0 | 1.5 | 4.0 | 10.0 | 14.0 | 22.0 | 25.0 | 21.5 | 17.0 |
| 18 | --- | 2.0 | .5 | .0 | 2.0 | 4.0 | 11.0 | 13.0 | 22.5 | 25.5 | 21.5 | 17.0 |
| 19 | 11.0 | 2.0 | .0 | .0 | 2.0 | 3.0 | 11.0 | 13.5 | 23.0 | 25.0 | 21.0 | 16.0 |
| 20 | 11.0 | 1.0 | .0 | .0 | 2.0 | 3.0 | 9.0 | 14.0 | 24.0 | 25.0 | 21.0 | 16.0 |
| 21 | 11.0 | 1.0 | .0 | .0 | 2.0 | 3.5 | 9.0 | 15.0 | 24.0 | 25.0 | 22.0 | 16.0 |
| 22 | 10.0 | 1.5 | .5 | .0 | 2.0 | 3.5 | 9.0 | 15.0 | 23.0 | 26.0 | 22.0 | 15.0 |
| 23 | 9.0 | 2.0 | 1.5 | .0 | 2.0 | 4.0 | 9.0 | 16.0 | 22.0 | 24.5 | 22.0 | 14.0 |
| 24 | 8.0 | 2.0 | 2.0 | .0 | 2.0 | 4.5 | 9.0 | 18.0 | 22.0 | 24.0 | 22.0 | 13.0 |
| 25 | 8.0 | 2.0 | 2.0 | .0 | 1.5 | 5.0 | 9.0 | 19.0 | 20.0 | 24.0 | 21.5 | 13.0 |
| 26 | 7.0 | 2.0 | 1.5 | .5 | 1.0 | 5.0 | 10.0 | 20.0 | 18.0 | 24.0 | 21.0 | 13.0 |
| 27 | 7.0 | 2.0 | 1.0 | 1.0 | 1.5 | 6.0 | 10.0 | 20.0 | 18.0 | 24.0 | 21.0 | 13.0 |
| 28 | 6.0 | 2.0 | 1.0 | 1.5 | 2.0 | 6.5 | 11.0 | 20.5 | 20.0 | 24.0 | 21.0 | 13.0 |
| 29 | 6.0 | 2.0 | 1.0 | 1.0 | --- | 7.0 | 11.0 | 21.0 | 20.0 | 24.0 | 21.0 | 12.0 |
| 30 | 5.0 | 2.0 | 1.0 | .0 | --- | 8.0 | 12.0 | 21.0 | 22.0 | 23.5 | 21.0 | 12.0 |
| 31 | 5.0 | --- | .5 | .0 | --- | --- | --- | 20.0 | --- | 23.5 | 22.0 | --- |
| MEAN | 10.5 | 3.0 | 1.0 | .0 | 1.5 | 4.0 | 10.0 | 16.0 | 21.5 | 24.5 | 22.5 | 17.5 |

## 04264050 ST. LAWRENCE RIVER NEAR WADDINGTON, NY

**LOCATION.**--Lat 44°51'27", long 75°14'46", St. Lawrence County, Hydrologic Unit 04150301, on right bank at Leishman Point, 2.1 mi (3.4 km) west of Waddington, 2.5 mi (4.0 km) upstream from Sucker Brook, and 3.3 mi (5.3 km) downstream from Iroquois Dam.

**DRAINAGE AREA.**--298,500 mi² (773,100 km²).

**PERIOD OF RECORD.**--January 1976 to November 1976, November 1977 to current year.

**GAGE.**--Water-stage recorder. Datum of gage is International Great Lakes Datum.

**REMARKS.**--Flow regulated by international agreement administered by International St. Lawrence River Board of control under the International Joint Commission. Records do not include water diverted from Lake Michigan by Chicago Sanitary and Ship Canal, operation of which began in 1900. Records include water diverted into Lake Superior from Hudson Bay drainage by the Long Lake Project, operation of which began in July 1939, and by the Ogoki Project, operation of which began in July 1943.

**EXTREMES FOR PERIOD OF RECORD.**--Maximum daily elevation, 244.80 ft (74.615 m) Apr. 6, 1976; minimum daily, 236.30 ft (72.024 m) Feb. 26, 1979.

**EXTREMES FOR CURRENT YEAR.**--Maximum elevation, 243.13 ft (74.106 m) June 26; minimum elevation. 237.33 ft (72.338 m) Jan. 15 and 16.

### ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 239.70 | 239.93 | 239.63 | 240.64 | 238.62 | 241.91 | 240.84 | 241.45 | 242.18 | 242.06 | 241.85 | 240.78 |
| 2 | 239.74 | 239.57 | 239.25 | 240.57 | 238.72 | 241.68 | 241.10 | 241.50 | 242.10 | 241.94 | 241.91 | 240.78 |
| 3 | 239.56 | 239.41 | 239.47 | 239.87 | 238.74 | 241.35 | 241.10 | 241.55 | 242.09 | 242.14 | 241.83 | 240.81 |
| 4 | 239.44 | 239.70 | 239.43 | 239.45 | 238.75 | 241.16 | 241.00 | 241.60 | 242.19 | 242.23 | 241.66 | 240.71 |
| 5 | 239.86 | 239.78 | 239.34 | 238.88 | 238.87 | 240.82 | 240.80 | 241.65 | 242.26 | 242.17 | 241.61 | 240.70 |
| 6 | 239.78 | 239.69 | 239.21 | 238.74 | 238.86 | 240.99 | 241.10 | 241.70 | 242.34 | 242.24 | 241.59 | 240.67 |
| 7 | 239.68 | 239.77 | 239.07 | 239.17 | 238.79 | 241.12 | 241.00 | 241.75 | 242.31 | 242.29 | 241.47 | 240.67 |
| 8 | 239.83 | 239.41 | 239.10 | 239.25 | 238.57 | 240.98 | 240.80 | 241.80 | 242.25 | 242.38 | 241.28 | 240.84 |
| 9 | 239.76 | 239.42 | 239.31 | 238.94 | 238.63 | 241.04 | 240.81 | 241.79 | 242.30 | 242.45 | 241.41 | 240.96 |
| 10 | 239.48 | 239.68 | 239.37 | 239.14 | 238.37 | 241.07 | 240.81 | 241.75 | 242.31 | 242.37 | 241.61 | 241.17 |
| 11 | 239.55 | 239.61 | 239.32 | 239.43 | 238.44 | 241.12 | 240.91 | 241.61 | 242.42 | 242.32 | 241.64 | 241.11 |
| 12 | 239.74 | 239.39 | 239.24 | 238.82 | 238.60 | 241.13 | 240.58 | 241.96 | 242.36 | 242.26 | 241.75 | 240.82 |
| 13 | 239.59 | 239.33 | 239.40 | 238.11 | 238.27 | 240.94 | 240.51 | 242.41 | 242.21 | 242.25 | 241.73 | 240.77 |
| 14 | 239.53 | 239.29 | 239.53 | 237.78 | 238.32 | 241.06 | 241.12 | 242.33 | 242.17 | 242.16 | 241.53 | 240.73 |
| 15 | 239.37 | 239.31 | 239.36 | 237.65 | 238.38 | 241.22 | 241.32 | 241.97 | 242.24 | 242.10 | 241.46 | 240.55 |
| 16 | 239.15 | 239.25 | 239.74 | 237.58 | 238.46 | 240.90 | 241.40 | 242.10 | 242.36 | 242.14 | 241.49 | 240.27 |
| 17 | 239.13 | 239.15 | 240.50 | 237.77 | 238.63 | 240.88 | 241.31 | 242.09 | 242.47 | 242.15 | 241.39 | 239.89 |
| 18 | 239.58 | 238.87 | 241.20 | 238.16 | 238.84 | 241.06 | 241.35 | 242.21 | 242.42 | 242.07 | 241.34 | 240.06 |
| 19 | 239.87 | 239.05 | 241.30 | 238.34 | 239.08 | 240.88 | 241.37 | 242.30 | 242.40 | 241.99 | 241.33 | 240.33 |
| 20 | 239.73 | 239.28 | 241.30 | 238.34 | 239.52 | 240.73 | 241.33 | 242.35 | 242.22 | 241.96 | 241.19 | 240.41 |
| 21 | 239.60 | 239.41 | 241.30 | 238.20 | 240.09 | 240.70 | 241.27 | 242.30 | 242.10 | 242.02 | 241.21 | 240.33 |
| 22 | 239.53 | 239.44 | 241.20 | 238.28 | 240.46 | 240.72 | 241.26 | 242.21 | 242.25 | 241.93 | 241.15 | 240.07 |
| 23 | 239.29 | 239.44 | 241.00 | 238.43 | 240.56 | 240.69 | 241.07 | 242.04 | 242.54 | 241.91 | 241.14 | 239.82 |
| 24 | 239.08 | 239.31 | 240.57 | 238.39 | 240.88 | 240.74 | 241.10 | 242.02 | 242.49 | 241.89 | 241.16 | 239.90 |
| 25 | 238.97 | 239.23 | 240.14 | 238.33 | 241.22 | 240.72 | 241.15 | 242.05 | 242.46 | 241.86 | 240.83 | 240.09 |
| 26 | 240.27 | 239.26 | 240.60 | 238.40 | 241.74 | 240.75 | 241.20 | 242.11 | 242.70 | 241.88 | 240.82 | 240.13 |
| 27 | 240.66 | 239.03 | 240.92 | 238.51 | 242.09 | 240.67 | 241.25 | 242.04 | 242.49 | 241.79 | 240.92 | 240.28 |
| 28 | 240.22 | 238.74 | 241.12 | 238.43 | 241.91 | 240.77 | 241.30 | 241.98 | 242.38 | 241.62 | 240.78 | 240.60 |
| 29 | 239.77 | 239.33 | 241.10 | 238.36 | --- | 241.03 | 241.35 | 242.02 | 242.32 | 241.31 | 240.67 | 240.45 |
| 30 | 239.57 | 239.78 | 241.00 | 238.53 | --- | 240.94 | 241.40 | 242.15 | 242.32 | 241.71 | 240.78 | 240.26 |
| 31 | 239.94 | --- | 241.10 | 238.67 | --- | 241.03 | --- | 242.20 | --- | 241.83 | 240.80 | --- |
| MEAN | 239.64 | 239.40 | 240.13 | 238.68 | 239.37 | 240.99 | 241.10 | 241.97 | 242.32 | 242.05 | 241.33 | 240.50 |
| MAX | 240.66 | 239.93 | 241.30 | 240.64 | 242.09 | 241.91 | 241.40 | 242.41 | 242.70 | 242.45 | 241.91 | 241.17 |
| MIN | 238.97 | 238.74 | 239.07 | 237.58 | 238.27 | 240.67 | 240.51 | 241.45 | 242.09 | 241.31 | 240.67 | 239.82 |

CAL YR 1980 MEAN 240.61 MAX 242.49 MIN 237.67
WTR YR 1981 MEAN 240.63 MAX 242.70 MIN 237.58

## 04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY
(National stream-quality accounting network station)
(National radiochemical network station)

LOCATION.—Lat 45°00'22", long 74°47'43", Stormont County, Ontario--St. Lawrence County, N.Y., Hydrologic Unit 04150301, at Robert Moses-Robert H. Saunders power dam on Lake St. Lawrence at the International Boundary at Cornwall, Ontario, 2.9 mi (4.7 km) upstream from Grass River, 6.2 mi (10.0 km) upstream from Raquette River, and 5.9 mi (9.5 km) northeast of Massena, N.Y.. Water-quality samples collected at power dam from taps at generators 17 and 30.

DRAINAGE AREA.—298,800 mi$^2$ (773,890 km$^2$).

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—June 1860 to current year. Monthly discharges only for some periods published in WSP 1307. Prior to October 1971 published as 04264000 "St. Lawrence River at Ogdensburg."

REVISED RECORDS.—WSP 1437: 1870, 1874, 1881, 1883, 1890.

GAGE.—There is no gage. Discharge is determined from summation of discharge through the Robert Moses-Robert H. Saunders Power Dam, the Long Sault Dam, the Massena Diversion, the Raisin River Diversion, the Cornwall and Massena municipal water supply, and the Cornwall and Wiley-Dondero navigation canals. U.S.-Canada coordinated discharge figures supplied by Corps of Engineers. Prior to 1956, base gage at lock 25 at Iroquois Ont. with supplementary gages. August 1956 to June 1958, base gage at lock 24 between Iroquois and Morrisburg, Ont., and supplementary gages. Prior to Aug. 1956, these were gages of the Canadian Hydrographic Service and from August 1956 to June 1958, were gages of the Hydro-Electric Power Commission of Ontario. Discharge in the reach of river at Cornwall, Ont.—near Massena, N.Y. is considered to be the same as discharge at Ogdensburg, N.Y. when adjusted for storage in Lake St. Lawrence.

REMARKS.—Since July 1958, flow regulated by international agreement administered by International St. Lawrence River Board of Control under the International Joint Commission. Records do not include water diverted from Lake Michigan by Illinois and Michigan Canal during period of its operation prior to 1910 and by Chicago Sanitary and Ship Canal, which began operation in 1900. Records include water diverted into Lake Superior from Hudson Bay drainage by the Long Lake Project, which began operation in July 1939, and by the Ogoki project, which began operation in July 1943.

COOPERATION.—Records of daily discharge furnished by Buffalo District, Corps of Engineers through International St. Lawrence River Board of Control.

AVERAGE DISCHARGE.—121 years (1860-1981), 242,800 ft$^3$/s (6,876 m$^3$/s).

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 352,000 ft$^3$/s (9,969 m$^3$/s) June 22, 1976; minimum daily, 139,000 ft$^3$/s (3,940 m$^3$/s) Feb. 7, 1936. Maximum monthly discharge, 350,000 ft$^3$/s (9,910 m$^3$/s) July 1973; minimum monthly, 154,000 ft$^3$/s (4,360 m$^3$/s) Feb. 1936.

EXTREMES FOR CURRENT YEAR.—Maximum daily discharge, 304,000 ft$^3$/s (8,609 m$^3$/s) Sept. 23, minimum daily, 210,000 ft$^3$/s (5,947 m$^3$/s) Dec. 27-Jan. 1.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 296000 | 283000 | 275000 | 210000 | 240000 | 240000 | 265000 | 248000 | 251000 | 258000 | 266000 | 286000 |
| 2 | 296000 | 283000 | 275000 | 213000 | 240000 | 252000 | 265000 | 249000 | 251000 | 258000 | 266000 | 286000 |
| 3 | 296000 | 283000 | 275000 | 220000 | 240000 | 260000 | 265000 | 249000 | 251000 | 258000 | 272000 | 286000 |
| 4 | 290000 | 283000 | 276000 | 225000 | 240000 | 260000 | 272000 | 249000 | 251000 | 261000 | 273000 | 286000 |
| 5 | 290000 | 283000 | 275000 | 240000 | 240000 | 260000 | 272000 | 249000 | 251000 | 261000 | 273000 | 289000 |
| 6 | 290000 | 283000 | 280000 | 230000 | 240000 | 260000 | 272000 | 249000 | 252000 | 261000 | 273000 | 289000 |
| 7 | 290000 | 284000 | 280000 | 230000 | 244000 | 267000 | 272000 | 249000 | 252000 | 261000 | 273000 | 289000 |
| 8 | 290000 | 281000 | 279000 | 230000 | 244000 | 267000 | 272000 | 249000 | 252000 | 260000 | 275000 | 289000 |
| 9 | 290000 | 281000 | 281000 | 240000 | 244000 | 267000 | 272000 | 245000 | 252000 | 261000 | 275000 | 289000 |
| 10 | 290000 | 281000 | 280000 | 220000 | 244000 | 267000 | 272000 | 245000 | 252000 | 263000 | 275000 | 289000 |
| 11 | 288000 | 281000 | 280000 | 220000 | 244000 | 267000 | 261000 | 245000 | 252000 | 262000 | 275000 | 289000 |
| 12 | 288000 | 281000 | 280000 | 248000 | 244000 | 267000 | 261000 | 245000 | 252000 | 262000 | 275000 | 300000 |
| 13 | 288000 | 281000 | 279000 | 248000 | 244000 | 267000 | 261000 | 245000 | 251000 | 263000 | 275000 | 300000 |
| 14 | 288000 | 281000 | 279000 | 248000 | 243000 | 268000 | 261000 | 245000 | 251000 | 263000 | 275000 | 300000 |
| 15 | 288000 | 279000 | 270000 | 248000 | 243000 | 268000 | 261000 | 245000 | 251000 | 263000 | 282000 | 300000 |
| 16 | 288000 | 279000 | 236000 | 248000 | 243000 | 268000 | 262000 | 244000 | 251000 | 264000 | 282000 | 300000 |
| 17 | 288000 | 279000 | 230000 | 240000 | 243000 | 268000 | 260000 | 244000 | 251000 | 263000 | 282000 | 300000 |
| 18 | 283000 | 279000 | 230000 | 240000 | 243000 | 269000 | 253000 | 244000 | 251000 | 263000 | 282000 | 300000 |
| 19 | 283000 | 279000 | 230000 | 240000 | 243000 | 268000 | 253000 | 244000 | 251000 | 263000 | 282000 | 302000 |
| 20 | 283000 | 279000 | 230000 | 240000 | 243000 | 268000 | 253000 | 244000 | 254000 | 263000 | 282000 | 302000 |
| 21 | 283000 | 279000 | 230000 | 240000 | 245000 | 267000 | 253000 | 244000 | 254000 | 263000 | 282000 | 300000 |
| 22 | 283000 | 277000 | 230000 | 240000 | 245000 | 267000 | 253000 | 244000 | 254000 | 263000 | 285000 | 301000 |
| 23 | 283000 | 277000 | 240000 | 240000 | 245000 | 267000 | 253000 | 251000 | 254000 | 263000 | 285000 | 304000 |
| 24 | 283000 | 277000 | 250000 | 240000 | 245000 | 267000 | 253000 | 251000 | 254000 | 263000 | 285000 | 302000 |
| 25 | 280000 | 277000 | 250000 | 240000 | 233000 | 267000 | 248000 | 251000 | 254000 | 267000 | 285000 | 302000 |
| 26 | 270000 | 277000 | 225000 | 240000 | 215000 | 267000 | 247000 | 251000 | 254000 | 267000 | 285000 | 302000 |
| 27 | 282000 | 277000 | 210000 | 240000 | 213000 | 267000 | 248000 | 251000 | 258000 | 267000 | 285000 | 302000 |
| 28 | 283000 | 277000 | 210000 | 240000 | 232000 | 265000 | 248000 | 251000 | 258000 | 267000 | 285000 | 302000 |
| 29 | 284000 | 275000 | 210000 | 240000 | --- | 265000 | 248000 | 251000 | 258000 | 267000 | 286000 | 302000 |
| 30 | 284000 | 275000 | 210000 | 240000 | --- | 265000 | 248000 | 252000 | 258000 | 267000 | 286000 | 302000 |
| 31 | 284000 | --- | 210000 | 240000 | --- | 265000 | --- | 251000 | --- | 268000 | 286000 | --- |
| TOTAL | 8882000 | 8391000 | 7795000 | 7318000 | 6722000 | 8207000 | 7784000 | 7674000 | 7586000 | 8153000 | 8648000 | 8890000 |
| MEAN | 286500 | 279700 | 251500 | 236100 | 240100 | 264700 | 259500 | 247500 | 252900 | 263000 | 279000 | 296300 |
| MAX | 296000 | 284000 | 281000 | 248000 | 245000 | 269000 | 272000 | 252000 | 258000 | 268000 | 286000 | 304000 |
| MIN | 270000 | 275000 | 210000 | 210000 | 213000 | 240000 | 247000 | 244000 | 251000 | 258000 | 266000 | 286000 |

CAL YR 1980 TOTAL 101395000 MEAN 277000 MAX 310000 MIN 210000
WTR YR 1981 TOTAL 96050000 MEAN 263200 MAX 304000 MIN 210000

## 04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

### WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955, 1966 to current year. Prior to October 1970, published as "near Massena, NY."
CHEMICAL DATA: 1955 (a), 1974 (c), 1975-81 (d).
MINOR ELEMENTS DATA: 1974-77 (b), 1978 (a), 1979 (b), 1980 (c), 1981 (b).
RADIOCHEMICAL DATA: 1974-81 (a).
ORGANIC DATA: OC--1974 (a), 1975 (b), 1977 (b), 1978-81 (d).
NUTRIENT DATA: 1974-75 (c), 1976-81 (d).
BIOLOGICAL DATA:
Bacteria--1974 (c), 1975-81 (d).
Phytoplankton--1974 (a), 1975-77 (d), 1978-81 (c).
Periphyton--1974 (a), 1975 (c), 1976-80 (b).
SEDIMENT DATA: 1975 (d), 1976-77 (c), 1978-81 (d).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1975 to current year.
WATER TEMPERATURES: October 1955 to October 1958, unpublished; January 1966 to current year.

REMARKS.--Temperature observations made approximately 68 ft (21 m) below normal forebay level. Temperature observations from October 1955 to October 1958 made at Aluminum Company of America Massena Canal power station.

COOPERATION.--Water-temperature record furnished by the Power Authority of the State of New York.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 400 micromhos Aug. 7, 1978, Mar. 29, 1979; minimum daily, 250 micromhos Dec. 21, 1978.
WATER TEMPERATURES: Maximum daily, 24.5°C on several days in August and September 1973 and August 1975; minimum daily, freezing point on many days during winter periods except 1972-74, 1979.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 390 micromhos June 29; minimum daily, 275 micromhos July 28.
WATER TEMPERATURES: Maximum daily, 22.0°C on several days during July and August; minimum daily, freezing point on several days during January.

REVISIONS.--The figures listed below supercede those previously published.

| | | | |
|---|---|---|---|
| Aug. 27, 1979 | 1000 hrs | Alkalinity (Mg/l as $CaCO_3$) | 82 |
| Sept. 25, 1979 | 1000 hrs | Hardness (Mg/l as $CaCO_3$) | 120 |
| | | Calcium, dissolved (Mg/l as Ca) | 36 |
| | | Magnesium, dissolved (Mg/l as Mg) | 7.6 |
| | | Potassium, dissolved (Mg/l as K) | 1.4 |
| | | Solids, sum of constituents, dissolved (Mg/l) | 167 |

### WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | TIME | DIS-CHARGE, IN CUBIC FEET PER SECOND | SPE-CIFIC CON-DUCT-ANCE (UMHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | TUR-BID-ITY (NTU) | BARO-METRIC PRES-SURE (MM OF HG) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) | STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) | HARD-NESS (MG/L AS CACO3) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT<br>28... | 1015 | 283000 | 310 | 7.6 | 11.0 | .40 | — | 11.2 | 96 | 20 | K4 | 130 |
| NOV<br>24... | 1030 | 277000 | 290 | 8.0 | 6.0 | .20 | 760 | 11.8 | 94 | K4 | K1 | 120 |
| DEC<br>29... | 1000 | 210000 | 325 | 7.6 | .5 | .20 | 760 | 11.4 | 84 | K3 | K1 | 130 |
| JAN<br>27... | 0945 | 240000 | 328 | 7.7 | .5 | .30 | 750 | 13.2 | 94 | K7 | K2 | 130 |
| FEB<br>24... | 1030 | 245000 | 290 | 6.7 | 1.0 | .17 | 760 | 13.9 | 101 | K10 | K2 | 120 |
| MAR<br>26... | 1015 | 267000 | 296 | 8.0 | 2.0 | .60 | 770 | 11.5 | 85 | K3 | K10 | 130 |
| APR<br>27... | 0930 | 248000 | 300 | 7.8 | 7.0 | .50 | 760 | 10.6 | 87 | K1 | <1 | 130 |
| MAY<br>28... | 1000 | 251000 | 320 | 7.9 | 12.0 | 2.2 | — | 10.0 | 96 | K2 | <1 | 120 |
| JUN<br>25... | 1000 | 254000 | 326 | 7.6 | 18.0 | 1.0 | 750 | 9.0 | 91 | 24 | K6 | 130 |
| JUL<br>27... | 0945 | 267000 | 300 | 7.4 | 22.0 | 1.2 | 765 | 7.9 | 91 | K4 | K3 | 120 |
| AUG<br>26... | 1000 | 285000 | 305 | 7.5 | 20.0 | .50 | 765 | 9.2 | 101 | K7 | K1 | 110 |
| SEP<br>24... | 1015 | 302000 | 320 | 7.6 | 16.0 | 1.2 | 765 | 8.5 | 86 | 26 | 23 | 130 |

K Results based on colony count outside the acceptable range (non-ideal colony count).

## 04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

### WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | HARD-NESS NONCAR-BONATE (MG/L AS CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | ALKA-LINITY LAB (MG/L AS CACO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 28... | 47 | 38 | 8.0 | 12 | 1.3 | 81 | 29 | 26 | .1 | .3 | 189 |
| NOV 24... | 39 | 37 | 7.5 | 11 | 1.4 | 84 | 25 | 27 | .1 | — | 181 |
| DEC 29... | 41 | 38 | 7.6 | 12 | 1.3 | 85 | 28 | 27 | .1 | .0 | 182 |
| JAN 27... | 40 | 38 | 7.8 | 13 | 1.4 | 87 | 28 | 25 | .1 | .3 | 174 |
| FEB 24... | 33 | 37 | 6.8 | 12 | 1.6 | 88 | 25 | 23 | .2 | .5 | 189 |
| MAR 26... | 42 | 40 | 7.7 | 12 | 1.5 | 90 | 27 | 25 | .1 | .2 | 188 |
| APR 27... | 34 | 40 | 8.2 | 14 | 1.5 | 100 | 26 | 24 | .1 | .1 | 183 |
| MAY 28... | 36 | 35 | 8.4 | 11 | 1.5 | 86 | 26 | 25 | .1 | <.1 | 208 |
| JUN 25... | 40 | 38 | 7.7 | 14 | 1.5 | 87 | 36 | 23 | .1 | .2 | 189 |
| JUL 27... | 39 | 36 | 8.0 | 14 | 1.3 | 84 | 25 | 25 | .1 | .3 | 206 |
| AUG 26... | 26 | 33 | 6.8 | 12 | 1.4 | 84 | 24 | 26 | .1 | .7 | 197 |
| SEP 24... | 43 | 37 | 8.0 | 12 | 1.2 | 82 | 28 | 24 | .2 | .6 | 177 |

| DATE | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) | NITRO-GEN, ORGANIC TOTAL (MG/L AS N) | NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) | NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) | NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) | NITRO-GEN, TOTAL (MG/L AS N) | NITRO-GEN DIS-SOLVED (MG/L AS N) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 28... | 164 | .15 | .15 | .040 | .030 | .27 | .23 | .31 | .26 | .46 | .41 |
| NOV 24... | — | .24 | .24 | .000 | .000 | .21 | .18 | .21 | .18 | .45 | .42 |
| DEC 29... | 166 | .30 | .28 | .030 | .040 | .48 | .12 | .51 | .16 | .81 | .44 |
| JAN 27... | 167 | .32 | .33 | <.010 | .040 | — | .19 | .32 | .23 | .64 | .56 |
| FEB 24... | 161 | .33 | .34 | .060 | .010 | .11 | .16 | .17 | .17 | .50 | .51 |
| MAR 26... | 169 | .27 | .29 | .020 | .060 | .20 | .15 | .22 | .21 | .49 | .50 |
| APR 27... | 176 | .23 | .49 | .050 | .070 | .39 | .28 | .44 | .35 | .67 | .84 |
| MAY 28... | 161 | .33 | .29 | .060 | .060 | .54 | .45 | .60 | .51 | .93 | .80 |
| JUN 25... | 174 | .27 | .28 | .040 | .040 | .42 | .28 | .46 | .32 | .73 | .60 |
| JUL 27... | 161 | .25 | .11 | .050 | .050 | .33 | .28 | .38 | .33 | .63 | .44 |
| AUG 26... | 155 | .09 | .11 | .020 | .030 | .37 | .31 | .39 | .34 | .48 | .45 |
| SEP 24... | 161 | .12 | .11 | .050 | .050 | .35 | .46 | .40 | .51 | .52 | .62 |

## 04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

### WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | PHOSPHORUS, TOTAL (MG/L AS P) | PHOSPHORUS, DISSOLVED (MG/L AS P) | ARSENIC TOTAL (UG/L AS AS) | ARSENIC DISSOLVED (UG/L AS AS) | BARIUM, TOTAL RECOVERABLE (UG/L AS BA) | BARIUM, DISSOLVED (UG/L AS BA) | CADMIUM TOTAL RECOVERABLE (UG/L AS CD) | CADMIUM DISSOLVED (UG/L AS CD) | CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) | CHROMIUM, DISSOLVED (UG/L AS CR) | COBALT, TOTAL RECOVERABLE (UG/L AS CO) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 28... | .030 | .020 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV 24... | .010 | .010 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| DEC 29... | .020 | .010 | 1 | 2 | 100 | 30 | 0 | 0 | 10 | 10 | 0 |
| JAN 27... | .010 | <.010 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB 24... | .110 | <.010 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAR 26... | .020 | .010 | 0 | 0 | 100 | 100 | 1 | 0 | 20 | 10 | 0 |
| APR 27... | .020 | <.010 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAY 28... | .020 | <.010 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUN 25... | .030 | .010 | 1 | 1 | 200 | 30 | 1 | <1 | 10 | <10 | -- |
| JUL 27... | .050 | .040 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG 26... | .020 | .010 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP 24... | .020 | .010 | 3 | 1 | 100 | 100 | 1 | 1 | 10 | 10 | 3 |

| DATE | COBALT, DISSOLVED (UG/L AS CO) | COPPER, TOTAL RECOVERABLE (UG/L AS CU) | COPPER, DISSOLVED (UG/L AS CU) | IRON, TOTAL RECOVERABLE (UG/L AS FE) | IRON, DISSOLVED (UG/L AS FE) | LEAD, TOTAL RECOVERABLE (UG/L AS PB) | LEAD, DISSOLVED (UG/L AS PB) | MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) | MANGANESE, DISSOLVED (UG/L AS MN) | MERCURY TOTAL RECOVERABLE (UG/L AS HG) | MERCURY DISSOLVED (UG/L AS HG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 28... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV 24... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| DEC 29... | 0 | 4 | 0 | 70 | 0 | 12 | 2 | 0 | 0 | .1 | .1 |
| JAN 27... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB 24... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAR 26... | 0 | 6 | 3 | 90 | 20 | 18 | 0 | 10 | 10 | .2 | .1 |
| APR 27... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAY 28... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUN 25... | 0 | 4 | 3 | 100 | <10 | 12 | 0 | 10 | 2 | <.1 | <.1 |
| JUL 27... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG 26... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP 24... | 3 | 9 | 3 | 100 | <10 | 3 | 3 | <10 | <10 | <.1 | <.1 |

## 04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

### WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) | NICKEL, DIS-SOLVED (UG/L AS NI) | SELE-NIUM, TOTAL (UG/L AS SE) | SELE-NIUM, DIS-SOLVED (UG/L AS SE) | SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) | SILVER, DIS-SOLVED (UG/L AS AG) | ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) | ZINC, DIS-SOLVED (UG/L AS ZN) | CARBON, ORGANIC TOTAL (MG/L AS C) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) | CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | | |
| 28... | -- | -- | -- | -- | -- | -- | -- | -- | 3.2 | -- | -- |
| NOV | | | | | | | | | | | |
| 24... | -- | -- | -- | -- | -- | -- | -- | -- | 2.8 | -- | -- |
| DEC | | | | | | | | | | | |
| 29... | 4 | 0 | 0 | 0 | 0 | 0 | 30 | 8 | -- | -- | .1 |
| JAN | | | | | | | | | | | |
| 27... | -- | -- | -- | -- | -- | -- | -- | -- | 3.0 | -- | -- |
| FEB | | | | | | | | | | | |
| 24... | -- | -- | -- | -- | -- | -- | -- | -- | 2.7 | -- | -- |
| MAR | | | | | | | | | | | |
| 26... | 1 | 1 | 0 | 0 | 0 | 0 | 240 | 40 | -- | 3.3 | .4 |
| APR | | | | | | | | | | | |
| 27... | -- | -- | -- | -- | -- | -- | -- | -- | 2.9 | -- | -- |
| MAY | | | | | | | | | | | |
| 28... | -- | -- | -- | -- | -- | -- | -- | -- | 4.6 | -- | -- |
| JUN | | | | | | | | | | | |
| 25... | 4 | 3 | 0 | 0 | 0 | 0 | 40 | 30 | -- | -- | .4 |
| JUL | | | | | | | | | | | |
| 27... | -- | -- | -- | -- | -- | -- | -- | -- | 3.2 | -- | -- |
| AUG | | | | | | | | | | | |
| 26... | -- | -- | -- | -- | -- | -- | -- | -- | 1.9 | -- | -- |
| SEP | | | | | | | | | | | |
| 24... | 2 | 2 | <1 | <1 | <1 | <1 | 80 | <10 | -- | 1.7 | .4 |

### RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT) | GROSS ALPHA, DIS-SOLVED (PCI/L AS U-NAT) | GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) | GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT) | GROSS BETA, DIS-SOLVED (PCI/L AS CS-137) | GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90) | GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) | GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) | RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L) | URANIUM DIS-SOLVED, EXTRAC-TION (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| DEC | | | | | | | | | | |
| 29... | 2.9 | 2.0 | <.4 | <.3 | 4.8 | 4.6 | <.4 | <.4 | .08 | .35 |
| JUN | | | | | | | | | | |
| 25... | <5.2 | 3.5 | <.4 | .3 | 3.1 | 2.9 | <.4 | <.4 | .12 | .37 |

### SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | TIME | DIS-CHARGE, IN CUBIC FEET PER SECOND | SEDI-MENT, SUS-PENDED (MG/L) | SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) | DATE | TIME | DIS-CHARGE, IN CUBIC FEET PER SECOND | SEDI-MENT, SUS-PENDED (MG/L) | SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) |
|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | APR | | | | |
| 28... | 1015 | 283000 | 5 | 3820 | 27... | 0930 | 248000 | 3 | 2010 |
| NOV | | | | | MAY | | | | |
| 24... | 1030 | 277000 | 2 | 1500 | 28... | 1000 | 251000 | 11 | 7460 |
| DEC | | | | | JUN | | | | |
| 29... | 1000 | 210000 | 2 | 1130 | 25... | 1000 | 254000 | 3 | 2060 |
| JAN | | | | | JUL | | | | |
| 27... | 0945 | 240000 | 2 | 1300 | 27... | 0945 | 267000 | 3 | 2160 |
| FEB | | | | | AUG | | | | |
| 24... | 1030 | 245000 | 3 | 1980 | 26... | 1000 | 285000 | 0 | .00 |
| MAR | | | | | SEP | | | | |
| 26... | 1015 | 267000 | 3 | 2160 | 24... | 1015 | 302000 | 4 | 3260 |

### 04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

### QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1980 TO SEPTEMBER 1981

### PHYTOPLANKTON

| DATE | NOV 24,80 | MAR 26,81 | MAY 28,81 | JUN 25,81 |
|---|---|---|---|---|
| TIME | 1030 | 1015 | 1000 | 1000 |
| TOTAL CELLS/ML | 750 | 1400 | 6000 | 1400 |
| DIVERSITY: DIVISION | 1.7 | 0.6 | 1.3 | 0.9 |
| .CLASS | 1.7 | 0.6 | 1.3 | 0.9 |
| ..ORDER | 2.1 | 0.9 | 2.2 | 1.7 |
| ...FAMILY | 2.3 | 1.0 | 2.5 | 1.8 |
| ....GENUS | 2.8 | 1.0 | 3.0 | 1.8 |

| ORGANISM | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT |
|---|---|---|---|---|---|---|---|---|
| CHLOROPHYTA (GREEN ALGAE) | | | | | | | | |
| .CHLOROPHYCEAE | | | | | | | | |
| ..CHLOROCOCCALES | | | | | | | | |
| ...CHARACIACEAE | | | | | | | | |
| ....SCHROEDERIA | — | - | — | - | — | - | — | - |
| ...COELASTRACEAE | | | | | | | | |
| ....COELASTRUM | — | - | — | - | — | - | — | - |
| ...HYDRODICTYACEAE | | | | | | | | |
| ....PEDIASTRUM | — | - | — | - | — | - | — | - |
| ...MICRACTINIACEAE | | | | | | | | |
| ....GOLENKINIA | — | - | — | - | — | - | — | - |
| ...OOCYSTACEAE | | | | | | | | |
| ....ANKISTRODESMUS | — | - | 52 | 4 | 120 | 2 | — | - |
| ....KIRCHNERIELLA | — | - | — | - | 40 | 1 | — | - |
| ....OOCYSTIS | — | - | — | - | — | - | — | - |
| ...SCENEDESMACEAE | | | | | | | | |
| ....ACTINASTRUM | 100 | 14 | — | - | — | - | — | - |
| ....SCENEDESMUS | 26 | 3 | 26 | 2 | 480 | 8 | 140 | 10 |
| ..TETRASPORALES | | | | | | | | |
| ...PALMELLACEAE | | | | | | | | |
| ....GLOEOCYSTIS | — | - | — | - | — | - | — | - |
| ....SPHAEROCYSTIS | — | - | — | - | — | - | — | - |
| ..VOLVOCALES | | | | | | | | |
| ...CHLAMYDOMONADACEAE | | | | | | | | |
| ....CHLAMYDOMONAS | — | - | — | - | 60 | 1 | 26 | 2 |
| ..ZYGNEMATALES | | | | | | | | |
| ...DESMIDIACEAE | | | | | | | | |
| ....STAURASTRUM | — | - | — | - | — | - | — | - |
| CHRYSOPHYTA | | | | | | | | |
| .BACILLARIOPHYCEAE | | | | | | | | |
| ..CENTRALES | | | | | | | | |
| ...COSCINODISCACEAE | | | | | | | | |
| ....CYCLOTELLA | 51 | 7 | 1200# | 85 | 440 | 7 | 52 | 4 |
| ....MELOSIRA | 26 | 3 | — | - | 120 | 2 | — | - |
| ..PENNALES | | | | | | | | |
| ...ACHNANTHACEAE | | | | | | | | |
| ....COCCONEIS | — | - | — | - | — | - | — | - |
| ...CYMBELLACEAE | | | | | | | | |
| ....CYMBELLA | — | - | — | - | 40 | 1 | — | - |
| ...DIATOMACEAE | | | | | | | | |
| ....DIATOMA | — | - | — | - | — | - | 26 | 2 |
| ...FRAGILARIACEAE | | | | | | | | |
| ....ASTERIONELLA | 300# | 40 | 39 | 3 | 200 | 3 | — | - |
| ....FRAGILARIA | 64 | 9 | — | - | 320 | 5 | — | - |
| ....SYNEDRA | — | - | — | - | — | - | — | - |
| ...GOMPHONEMATACEAE | | | | | | | | |
| ....GOMPHONEMA | — | - | — | - | 40 | 1 | — | - |
| ...NAVICULACEAE | | | | | | | | |
| ....NAVICULA | 13 | 2 | 13 | 1 | * | 0 | 13 | 1 |
| ....STAURONEIS | — | - | — | - | — | - | — | - |
| ...NITZSCHIACEAE | | | | | | | | |
| ....NITZSCHIA | — | - | 13 | 1 | 220 | 4 | — | - |
| ...TABELLARIACEAE | | | | | | | | |
| ....TABELLARIA | — | - | — | - | * | 0 | — | - |
| CRYPTOPHYTA (CRYPTOMONADS) | | | | | | | | |
| .CRYPTOPHYCEAE | | | | | | | | |
| ..CRYPTOMONADALES | | | | | | | | |
| ...CRYPTOCHRYSIDACEAE | | | | | | | | |
| ....CHROOMONAS | 51 | 7 | 13 | 1 | — | - | 13 | 1 |
| ...CRYPTOMONADACEAE | | | | | | | | |
| ....CRYPTOMONAS | 13 | 2 | — | - | — | - | — | - |

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

## 04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

### QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1980 TO SEPTEMBER 1981

### PHYTOPLANKTON

| DATE<br>TIME | NOV 24,80<br>1030 | | MAR 26,81<br>1015 | | MAY 28,81<br>1000 | | JUN 25,81<br>1000 | |
|---|---|---|---|---|---|---|---|---|
| ORGANISM | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT |
| CYANOPHYTA (BLUE-GREEN ALGAE) | | | | | | | | |
| .CYANOPHYCEAE | | | | | | | | |
| ..CHROOCOCCALES | | | | | | | | |
| ...CHROOCOCCACEAE | | | | | | | | |
| ....AGMENELLUM | -- | - | -- | - | 160 | 3 | -- | - |
| ....ANACYSTIS | 77 | 10 | 64 | 5 | 900 | 15 | 840# | 59 |
| ....GOMPHOSPHAERIA | -- | - | -- | - | 400 | 7 | -- | - |
| ..HORMOGONALES | | | | | | | | |
| ...NOSTOCACEAE | | | | | | | | |
| ....APHANIZOMENON | -- | - | -- | - | -- | - | -- | - |
| ...OSCILLATORIACEAE | | | | | | | | |
| ....OSCILLATORIA | -- | - | -- | - | 2400# | 40 | 320# | 23 |
| PYRRHOPHYTA (FIRE ALGAE) | | | | | | | | |
| .DINOPHYCEAE | | | | | | | | |
| ..PERIDINIALES | | | | | | | | |
| ...GLENODINIACEAE | | | | | | | | |
| ....GLENODINIUM | 26 | 3 | -- | - | -- | - | -- | - |
| ...PERIDINIACEAE | | | | | | | | |
| ....PERIDINIUM | -- | - | -- | - | 40 | 1 | -- | - |

| DATE<br>TIME | JUL 27,81<br>0945 | AUG 26,81<br>1000 | SEP 24,81<br>1015 |
|---|---|---|---|
| TOTAL CELLS/ML | 3800 | 4400 | 82 |
| DIVERSITY: DIVISION | 1.7 | 1.0 | 0.0 |
| .CLASS | 1.7 | 1.0 | 0.0 |
| ..ORDER | 2.8 | 1.4 | 0.0 |
| ...FAMILY | 3.2 | 1.8 | 0.9 |
| ....GENUS | 3.6 | 1.9 | 0.9 |

| ORGANISM | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT |
|---|---|---|---|---|---|---|
| CHLOROPHYTA (GREEN ALGAE) | | | | | | |
| .CHLOROPHYCEAE | | | | | | |
| ..CHLOROCOCCALES | | | | | | |
| ...CHARACIACEAE | | | | | | |
| ....SCHROEDERIA | 56 | 1 | -- | - | -- | - |
| ...COELASTRACEAE | | | | | | |
| ....COELASTRUM | -- | - | 220 | 5 | -- | - |
| ...HYDRODICTYACEAE | | | | | | |
| ....PEDIASTRUM | -- | - | 440 | 10 | -- | - |
| ...MICRACTINIACEAE | | | | | | |
| ....GOLENKINIA | -- | - | 28 | 1 | -- | - |
| ...OOCYSTACEAE | | | | | | |
| ....ANKISTRODESMUS | -- | - | -- | - | -- | - |
| ....KIRCHNERIELLA | 42 | 1 | -- | - | -- | - |
| ....OOCYSTIS | 110 | 3 | 140 | 3 | -- | - |
| ...SCENEDESMACEAE | | | | | | |
| ....ACTINASTRUM | -- | - | -- | - | -- | - |
| ....SCENEDESMUS | 280 | 7 | 83 | 2 | -- | - |
| ..TETRASPORALES | | | | | | |
| ...PALMELLACEAE | | | | | | |
| ....GLOEOCYSTIS | -- | - | 110 | 3 | -- | - |
| ....SPHAEROCYSTIS | 590# | 15 | 350 | 8 | -- | - |
| ..VOLVOCALES | | | | | | |
| ...CHLAMYDOMONADACEAE | | | | | | |
| ....CHLAMYDOMONAS | 150 | 4 | 28 | 1 | -- | - |
| ..ZYGNEMATALES | | | | | | |
| ...DESMIDIACEAE | | | | | | |
| ....STAURASTRUM | * | 0 | -- | - | -- | - |

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, OCTOBER 1980 TO SEPTEMBER 1981

PHYTOPLANKTON

| DATE | JUL 27,81 | | AUG 26,81 | | SEP 24,81 | |
|---|---|---|---|---|---|---|
| TIME | 0945 | | 1000 | | 1015 | |
| ORGANISM | CELLS /ML | PER-CENT | CELLS /ML | PER-CENT | CELLS /ML | PER-CENT |
| CHRYSOPHYTA | | | | | | |
| .BACILLARIOPHYCEAE | | | | | | |
| ..CENTRALES | | | | | | |
| ...COSCINODISCACEAE | | | | | | |
| ....CYCLOTELLA | 240 | 6 | 42 | 1 | -- | - |
| ....MELOSIRA | 140 | 4 | -- | - | -- | - |
| ..PENNALES | | | | | | |
| ...ACHNANTHACEAE | | | | | | |
| ....COCCONEIS | 28 | 1 | -- | - | -- | - |
| ...CYMBELLACEAE | | | | | | |
| ....CYMBELLA | -- | - | -- | - | -- | - |
| ...DIATOMACEAE | | | | | | |
| ....DIATOMA | -- | - | -- | - | -- | - |
| ...FRAGILARIACEAE | | | | | | |
| ....ASTERIONELLA | 42 | 1 | -- | - | -- | - |
| ....FRAGILARIA | -- | - | -- | - | -- | - |
| ....SYNEDRA | -- | - | -- | - | 27# | 33 |
| ...GOMPHONEMATACEAE | | | | | | |
| ....GOMPHONEMA | -- | - | -- | - | -- | - |
| ...NAVICULACEAE | | | | | | |
| ....NAVICULA | * | 0 | -- | - | 55# | 67 |
| ....STAURONEIS | -- | - | * | 0 | -- | - |
| ...NITZSCHIACEAE | | | | | | |
| ....NITZSCHIA | 270 | 7 | -- | - | -- | - |
| ...TABELLARIACEAE | | | | | | |
| ....TABELLARIA | -- | - | -- | - | -- | - |
| CRYPTOPHYTA (CRYPTOMONADS) | | | | | | |
| .CRYPTOPHYCEAE | | | | | | |
| ..CRYPTOMONADALES | | | | | | |
| ...CRYPTOCHRYSIDACEAE | | | | | | |
| ....CHROOMONAS | 70 | 2 | -- | - | -- | - |
| ...CRYPTOMONADACEAE | | | | | | |
| ....CRYPTOMONAS | 56 | 1 | -- | - | -- | - |
| CYANOPHYTA (BLUE-GREEN ALGAE) | | | | | | |
| .CYANOPHYCEAE | | | | | | |
| ..CHROOCOCCALES | | | | | | |
| ...CHROOCOCCACEAE | | | | | | |
| ....AGMENELLUM | 280 | 7 | -- | - | -- | - |
| ....ANACYSTIS | 700# | 18 | -- | - | -- | - |
| ....GOMPHOSPHAERIA | -- | - | 2900# | 66 | -- | - |
| ..HORMOGONALES | | | | | | |
| ...NOSTOCACEAE | | | | | | |
| ....APHANIZOMENON | 600# | 16 | -- | - | -- | - |
| ...OSCILLATORIACEAE | | | | | | |
| ....OSCILLATORIA | 110 | 3 | -- | - | -- | - |
| PYRRHOPHYTA (FIRE ALGAE) | | | | | | |
| .DINOPHYCEAE | | | | | | |
| ..PERIDINIALES | | | | | | |
| ...GLENODINIACEAE | | | | | | |
| ....GLENODINIUM | -- | - | 28 | 1 | -- | - |
| ...PERIDINIACEAE | | | | | | |
| ....PERIDINIUM | -- | - | -- | - | -- | - |

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

## 04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

### SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

ONCE-DAILY

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 320 | 320 | 315 | 300 | 320 | 300 | 300 | 320 | --- | 340 | 290 | --- |
| 2 | 310 | --- | 315 | 290 | 320 | 310 | 310 | 320 | 310 | 380 | 300 | 290 |
| 3 | 310 | 330 | 315 | 290 | 320 | 300 | 300 | 320 | 310 | 340 | 290 | 290 |
| 4 | 330 | 340 | 310 | --- | 320 | 300 | 300 | 320 | 310 | 350 | 280 | 290 |
| 5 | 310 | 340 | 315 | --- | 320 | 310 | 310 | 320 | 310 | 350 | 280 | 300 |
| 6 | 310 | 340 | 320 | 300 | 320 | 300 | 300 | 320 | 310 | 350 | 300 | --- |
| 7 | 310 | 340 | 310 | --- | 330 | 310 | 310 | 320 | 340 | 320 | 280 | --- |
| 8 | 310 | 340 | 320 | 290 | 330 | 310 | 310 | 320 | 340 | 350 | 310 | --- |
| 9 | 300 | 340 | 315 | 300 | 320 | --- | 310 | 320 | 300 | 320 | --- | 290 |
| 10 | 300 | 350 | 320 | 290 | 330 | 310 | 310 | 320 | --- | 315 | 310 | 290 |
| 11 | 310 | 360 | 320 | 290 | 330 | 310 | 310 | --- | 330 | 350 | 310 | 290 |
| 12 | 310 | 340 | 315 | 290 | 330 | 310 | 310 | --- | 310 | 320 | 320 | 290 |
| 13 | 320 | 340 | 310 | 300 | 330 | 310 | 310 | 320 | 310 | 320 | 320 | 290 |
| 14 | 300 | 330 | 320 | 300 | 320 | 310 | 300 | 330 | 310 | 320 | 330 | --- |
| 15 | 300 | 340 | 320 | 290 | 320 | 310 | 310 | --- | 310 | 310 | 340 | 290 |
| 16 | 310 | 360 | 310 | 290 | 330 | 310 | 310 | 330 | 320 | 320 | 310 | 290 |
| 17 | 310 | 360 | 315 | 290 | 320 | 320 | 310 | 330 | 310 | 320 | 350 | --- |
| 18 | 310 | 340 | 320 | 290 | 320 | 320 | 310 | --- | 320 | 310 | --- | 290 |
| 19 | 310 | 340 | 315 | 290 | 320 | 320 | 310 | --- | 330 | 310 | 310 | 290 |
| 20 | 310 | 330 | 315 | 290 | 320 | 310 | 310 | --- | 310 | --- | 300 | --- |
| 21 | 300 | 350 | 315 | 290 | 320 | 310 | 310 | 310 | --- | --- | --- | --- |
| 22 | 300 | 350 | 320 | 290 | 320 | 310 | --- | 350 | 320 | 310 | 310 | 300 |
| 23 | 300 | 360 | 320 | 300 | 320 | 310 | 310 | --- | 310 | 310 | 310 | 290 |
| 24 | 320 | 340 | 315 | 300 | 290 | 310 | 310 | --- | 320 | 310 | --- | 290 |
| 25 | 300 | 320 | 320 | 300 | --- | 320 | 310 | --- | 340 | --- | 300 | 290 |
| 26 | 300 | 315 | 320 | 290 | 310 | 310 | 310 | 350 | 360 | --- | 305 | 290 |
| 27 | 310 | 315 | 320 | 300 | 300 | 300 | 310 | 350 | 350 | 300 | 280 | 280 |
| 28 | 310 | 320 | 320 | 330 | 310 | 310 | 320 | 320 | 370 | 275 | 290 | 280 |
| 29 | 280 | 320 | 320 | 320 | --- | 310 | 310 | 300 | 390 | 290 | 290 | 280 |
| 30 | --- | 320 | 320 | 320 | --- | --- | 320 | --- | 340 | 300 | 290 | 290 |
| 31 | 330 | --- | 320 | 320 | --- | --- | --- | 310 | --- | 300 | 290 | --- |
| MEAN | 308 | 338 | 317 | 298 | 320 | 310 | 309 | 324 | 326 | 322 | 304 | 290 |

### TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

ONCE-DAILY

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 17.0 | 10.0 | 5.0 | .5 | 1.0 | 1.0 | 3.0 | 7.0 | 13.5 | 19.0 | 21.0 | --- |
| 2 | 17.0 | 9.5 | 5.5 | 1.0 | 1.0 | --- | 3.5 | 7.0 | 14.0 | 19.0 | 21.5 | 21.0 |
| 3 | 17.0 | 9.5 | 5.0 | --- | 1.0 | 1.0 | 4.0 | 7.5 | 14.0 | 19.0 | 21.5 | 20.5 |
| 4 | 17.0 | 9.5 | 4.0 | --- | 1.0 | 1.0 | 4.5 | 8.0 | 15.0 | 19.0 | 21.5 | 20.5 |
| 5 | 16.0 | 9.5 | 4.0 | --- | 1.0 | 1.0 | 5.0 | 8.0 | 15.0 | 20.0 | 21.5 | 20.5 |
| 6 | 16.0 | 9.0 | 4.0 | .5 | 1.0 | 1.0 | 5.0 | 8.0 | 15.0 | 20.0 | 21.5 | --- |
| 7 | 16.0 | 9.0 | 4.0 | --- | 1.0 | 1.0 | 5.0 | 9.0 | 15.0 | 20.0 | 21.5 | --- |
| 8 | 15.5 | 9.0 | 4.0 | .0 | 1.0 | 1.5 | 5.0 | 9.0 | 15.0 | 20.5 | 21.5 | --- |
| 9 | 15.5 | 8.5 | 4.0 | .0 | 1.0 | --- | 5.5 | 9.0 | 15.5 | 22.0 | 21.5 | 20.0 |
| 10 | 15.0 | 8.5 | 4.0 | --- | 1.0 | 1.5 | 6.0 | 9.0 | --- | 22.0 | --- | 20.0 |
| 11 | 15.0 | 8.0 | 3.5 | --- | 1.0 | 1.5 | 6.0 | --- | 16.0 | 22.0 | 22.0 | --- |
| 12 | 14.5 | 8.0 | 3.5 | --- | 1.0 | 1.5 | 6.0 | --- | 17.0 | 22.0 | 22.0 | 19.0 |
| 13 | 14.5 | 7.5 | 3.0 | .0 | 1.0 | 1.5 | 6.0 | 9.0 | 17.0 | 22.0 | 22.0 | 19.5 |
| 14 | 14.0 | 7.5 | 3.0 | --- | 1.0 | 1.0 | 6.0 | 9.0 | 17.0 | 22.0 | 22.0 | --- |
| 15 | 14.0 | 7.0 | 2.5 | --- | 1.0 | 1.0 | 6.0 | --- | 17.0 | 21.5 | 22.0 | 19.5 |
| 16 | 14.0 | 7.0 | 2.0 | --- | 1.0 | 1.0 | 5.5 | --- | 17.5 | 21.5 | 22.0 | 19.5 |
| 17 | 14.0 | 6.5 | 1.5 | --- | 1.0 | 1.0 | 6.0 | 9.0 | 17.5 | 22.0 | 21.5 | --- |
| 18 | 14.0 | 6.5 | 1.0 | --- | 1.0 | 1.0 | 6.0 | --- | 17.5 | 22.0 | --- | 19.0 |
| 19 | 14.0 | 6.5 | 1.0 | .0 | .5 | 1.0 | 6.0 | --- | 17.5 | 22.0 | 21.5 | 19.0 |
| 20 | 14.0 | 6.0 | 1.0 | --- | .5 | 1.0 | 5.5 | --- | 18.0 | --- | 21.5 | --- |
| 21 | 13.0 | 6.0 | 1.0 | --- | 1.0 | 1.0 | 5.5 | 10.0 | 18.0 | --- | --- | --- |
| 22 | 13.0 | 6.0 | 1.0 | .0 | 1.0 | 1.0 | --- | --- | 18.0 | --- | 22.0 | 18.0 |
| 23 | 12.5 | 6.0 | .5 | .0 | 1.0 | 1.5 | 6.0 | --- | 18.0 | 21.5 | 22.0 | 17.0 |
| 24 | 12.5 | 6.0 | .5 | .0 | 1.0 | 1.5 | 6.0 | --- | 18.0 | 21.5 | --- | 16.5 |
| 25 | 12.0 | 6.0 | .5 | .0 | 1.0 | --- | 6.0 | --- | 18.0 | --- | 21.0 | 16.5 |
| 26 | 12.0 | 6.0 | .5 | .0 | 1.0 | 2.0 | 6.0 | 12.0 | 18.5 | --- | 21.0 | 16.5 |
| 27 | 11.0 | 6.0 | .5 | .5 | --- | 2.0 | 6.5 | 12.5 | 18.5 | 22.0 | 21.0 | 16.5 |
| 28 | 11.0 | 5.5 | .5 | 1.0 | --- | 2.0 | 7.0 | 12.5 | 18.5 | 21.5 | 21.0 | 16.0 |
| 29 | --- | 5.0 | .5 | 1.0 | --- | 2.5 | 7.0 | 12.5 | 18.5 | 21.0 | 21.0 | 15.5 |
| 30 | --- | 5.0 | .5 | 1.0 | --- | --- | 7.0 | 13.0 | 18.5 | 21.0 | 21.0 | 14.0 |
| 31 | --- | --- | .5 | 1.0 | --- | --- | --- | 13.0 | --- | 21.0 | 21.0 | --- |
| MEAN | 14.5 | 7.5 | 2.5 | .5 | 1.0 | 1.5 | 5.5 | 9.5 | 17.0 | 21.0 | 21.5 | 18.5 |

## 434556074374401, (0426545295) SAGAMORE LAKE OUTLET NEAR RAQUETTE LAKE, NY

**LOCATION.**--Lat 43°45'56", long 74°37'44", Hamilton County, Hydrologic Unit 04150305, on left bank 75 ft (23 m) downstream from bridge on private road at Sagamore Conference Center, 90 ft (27 m) downstream from outlet dam on Sagamore Lake, 0.8 mi (1.3 km) upstream from mouth, and 3.5 mi (5.6 km) southeast of Raquette Lake.

**DRAINAGE AREA.**--19.1 mi² (49.5 km²).

**PERIOD OF RECORD.**--October 1977 to December 1981 (discontinued).

**REVISED RECORDS.**--WRD NY-80-1: 1978 (M).

**GAGE.**--Water-stage recorder. Altitude of gage is 1,900 ft (579 m), from topographic map.

**REMARKS.**--Records good except those for winter periods, which are poor.

**EXTREMES FOR PERIOD OF RECORD.**--Maximum discharge, 731 ft³/s (20.7 m³/s) Apr. 28, 1979, gage height 6.25 ft (1.905 m); minimum, 3.75 ft³/s (0.11 m³/s) July 25, 26, 1979, gage height, 3.13 ft (0.954 m).

**EXTREMES FOR CURRENT PERIOD.**--Water year 1981: Maximum discharge during period, 581 ft³/s (16.5 m³/s) Feb. 21, gage height, 6.00 ft (1.829 m); minimum, 5.0 ft³/s (0.14 m³/s) July 18, gage height 3.23 ft (0.985 m).

October to December 1981: Maximum discharge during period, 716 ft³/s (20.3 m³/s) Oct. 29, gage height 6.30 ft (1.920 m); minimum 13 ft³/s (0.368 m³/s) Dec. 21-23, gage height 3.47 ft (1.058 m).

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14 | 30 | 24 | 9.4 | 7.2 | 52 | 242 | 47 | 18 | 15 | 32 | 8.2 |
| 2 | 13 | 29 | 22 | 9.0 | 11 | 45 | 350 | 42 | 16 | 12 | 23 | 8.2 |
| 3 | 13 | 25 | 34 | 8.6 | 15 | 41 | 199 | 33 | 15 | 11 | 17 | 9.6 |
| 4 | 15 | 23 | 51 | 8.2 | 17 | 33 | 125 | 28 | 14 | 9.6 | 14 | 12 |
| 5 | 16 | 50 | 43 | 7.8 | 22 | 28 | 124 | 24 | 13 | 8.9 | 15 | 14 |
| 6 | 16 | 85 | 31 | 7.4 | 28 | 26 | 118 | 23 | 12 | 9.6 | 23 | 13 |
| 7 | 16 | 71 | 25 | 7.2 | 28 | 25 | 81 | 22 | 12 | 9.3 | 26 | 12 |
| 8 | 15 | 95 | 23 | 7.0 | 24 | 23 | 57 | 21 | 11 | 8.6 | 24 | 12 |
| 9 | 13 | 139 | 43 | 7.0 | 22 | 22 | 48 | 20 | 12 | 7.6 | 41 | 22 |
| 10 | 12 | 120 | 74 | 6.8 | 18 | 21 | 55 | 18 | 14 | 7.6 | 55 | 36 |
| 11 | 11 | 95 | 69 | 6.8 | 21 | 21 | 57 | 18 | 15 | 6.7 | 50 | 56 |
| 12 | 11 | 65 | 51 | 6.6 | 35 | 20 | 61 | 28 | 15 | 6.2 | 58 | 69 |
| 13 | 10 | 46 | 41 | 6.6 | 81 | 20 | 58 | 70 | 13 | 5.9 | 59 | 58 |
| 14 | 10 | 39 | 34 | 6.6 | 97 | 18 | 49 | 83 | 13 | 5.7 | 54 | 44 |
| 15 | 9.8 | 33 | 28 | 6.6 | 91 | 18 | 43 | 63 | 23 | 5.7 | 50 | 33 |
| 16 | 9.8 | 28 | 25 | 6.4 | 76 | 17 | 38 | 76 | 42 | 5.7 | 55 | 24 |
| 17 | 9.8 | 23 | 23 | 6.4 | 64 | 17 | 33 | 87 | 48 | 5.4 | 64 | 20 |
| 18 | 10 | 22 | 21 | 6.4 | 55 | 17 | 45 | 71 | 51 | 5.2 | 58 | 26 |
| 19 | 13 | 21 | 20 | 6.4 | 54 | 16 | 77 | 56 | 39 | 5.2 | 44 | 41 |
| 20 | 14 | 19 | 19 | 6.2 | 141 | 15 | 69 | 44 | 28 | 5.4 | 29 | 39 |
| 21 | 15 | 18 | 17 | 6.2 | 536 | 15 | 50 | 36 | 22 | 20 | 22 | 32 |
| 22 | 17 | 17 | 16 | 6.2 | 378 | 14 | 38 | 31 | 19 | 64 | 16 | 43 |
| 23 | 20 | 16 | 16 | 6.2 | 321 | 13 | 30 | 27 | 19 | 65 | 14 | 92 |
| 24 | 20 | 16 | 14 | 6.2 | 350 | 13 | 29 | 23 | 18 | 41 | 12 | 145 |
| 25 | 20 | 23 | 13 | 6.2 | 307 | 13 | 31 | 21 | 17 | 26 | 12 | 136 |
| 26 | 112 | 31 | 12 | 6.2 | 147 | 13 | 34 | 19 | 24 | 18 | 11 | 85 |
| 27 | 156 | 30 | 12 | 6.4 | 87 | 13 | 34 | 19 | 31 | 17 | 10 | 61 |
| 28 | 93 | 28 | 11 | 6.4 | 61 | 14 | 33 | 17 | 31 | 15 | 9.3 | 53 |
| 29 | 58 | 28 | 11 | 6.6 | --- | 16 | 32 | 16 | 24 | 28 | 8.9 | 48 |
| 30 | 42 | 28 | 10 | 6.6 | --- | 42 | 43 | 17 | 18 | 51 | 8.6 | 43 |
| 31 | 32 | --- | 9.6 | 6.8 | --- | 259 | --- | 18 | --- | 47 | 8.2 | --- |
| TOTAL | 836.4 | 1293 | 842.6 | 213.4 | 3094.2 | 920 | 2283 | 1118 | 647 | 548.3 | 923.0 | 1295.0 |
| MEAN | 27.0 | 43.1 | 27.2 | 6.88 | 111 | 29.7 | 76.1 | 36.1 | 21.6 | 17.7 | 29.8 | 43.2 |
| MAX | 156 | 139 | 74 | 9.4 | 536 | 259 | 350 | 87 | 51 | 65 | 64 | 145 |
| MIN | 9.8 | 16 | 9.6 | 6.2 | 7.2 | 13 | 29 | 16 | 11 | 5.2 | 8.2 | 8.2 |
| CFSM | 1.41 | 2.25 | 1.42 | .36 | 5.79 | 1.55 | 3.97 | 1.88 | 1.13 | .92 | 1.56 | 2.25 |
| IN. | 1.62 | 2.51 | 1.64 | .41 | 6.00 | 1.79 | 4.43 | 2.17 | 1.26 | 1.06 | 1.79 | 2.51 |

CAL YR 1980 TOTAL 11864.3 MEAN 32.4 MAX 556 MIN 4.2 CFSM 1.69 IN 23.02
WTR YR 1981 TOTAL 14013.9 MEAN 38.4 MAX 536 MIN 5.2 CFSM 2.00 IN 27.19

## 434556074374401, (0426545295) SAGAMORE LAKE OUTLET NEAR RAQUETTE LAKE, NY--Continued

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | 69 | 23 | | | | | | | | | |
| 2 | 35 | 55 | 24 | | | | | | | | | |
| 3 | 34 | 47 | 24 | | | | | | | | | |
| 4 | 34 | 42 | 24 | | | | | | | | | |
| 5 | 34 | 38 | 23 | | | | | | | | | |
| 6 | 34 | 38 | 21 | | | | | | | | | |
| 7 | 50 | 43 | 19 | | | | | | | | | |
| 8 | 85 | 43 | 19 | | | | | | | | | |
| 9 | 103 | 39 | 19 | | | | | | | | | |
| 10 | 84 | 33 | 18 | | | | | | | | | |
| 11 | 61 | 30 | 17 | | | | | | | | | |
| 12 | 48 | 28 | 17 | | | | | | | | | |
| 13 | 40 | 25 | 16 | | | | | | | | | |
| 14 | 33 | 23 | 16 | | | | | | | | | |
| 15 | 29 | 23 | 16 | | | | | | | | | |
| 16 | 27 | 24 | 16 | | | | | | | | | |
| 17 | 24 | 27 | 16 | | | | | | | | | |
| 18 | 24 | 30 | 15 | | | | | | | | | |
| 19 | 36 | 32 | 15 | | | | | | | | | |
| 20 | 45 | 40 | 14 | | | | | | | | | |
| 21 | 43 | 62 | 13 | | | | | | | | | |
| 22 | 39 | 66 | 13 | | | | | | | | | |
| 23 | 36 | 54 | 14 | | | | | | | | | |
| 24 | 45 | 43 | 17 | | | | | | | | | |
| 25 | 47 | 32 | 19 | | | | | | | | | |
| 26 | 43 | 28 | 19 | | | | | | | | | |
| 27 | 102 | 28 | 17 | | | | | | | | | |
| 28 | 504 | 31 | 17 | | | | | | | | | |
| 29 | 397 | 32 | 17 | | | | | | | | | |
| 30 | 175 | 28 | 16 | | | | | | | | | |
| 31 | 97 | --- | 15 | | | | | | | | | |
| TOTAL | 2424 | 1133 | 549 | | | | | | | | | |
| MEAN | 78.2 | 37.8 | 17.7 | | | | | | | | | |
| MAX | 504 | 69 | 24 | | | | | | | | | |
| MIN | 24 | 23 | 13 | | | | | | | | | |
| CFSM | 4.08 | 1.97 | .92 | | | | | | | | | |
| IN. | 4.70 | 2.20 | 1.07 | | | | | | | | | |

CAL YR 1981 TOTAL 15147.9 MEAN 41.5 MAX 536 MIN 5.2 CFSM 2.17 IN 29.39

## 04266500 RAQUETTE RIVER AT PIERCEFIELD, NY

LOCATION.--Lat 44°14'05", long 74°34'20", St. Lawrence County, Hydrologic Unit 04150305, on left bank 0.5 mi (0.8 km) downstream from powerplant at Piercefield, and 1.5 mi (2.4 km) upstream from Dead Creek.

DRAINAGE AREA.--722 mi² (1,870 km²).

PERIOD OF RECORD.--August 1908 to current year.

REVISED RECORDS.--WSP 604: 1924. WSP 759: Drainage area. WSP 1387: 1910, 1913, 1914(M), 1916, 1921.

GAGE.--Water-stage recorder. Datum of gage is 1,502.12 ft (457.846 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 22, 1912, nonrecording gage at same site (datum of gage lowered 2 ft or 0.6 m Jan. 1, 1911, to present datum).

REMARKS.--Records good except those for winter periods, which are fair. Seasonal distribution of flow modified by natural storage in lakes and ponds upstream from station and by regulation of Forked Lake, Round Lake, Lows Lake, and Raquette Pond (Tupper Lake) at Setting Pole Dam. Extensive diurnal fluctuation caused by powerplant at Piercefield.

AVERAGE DISCHARGE.--73 years, 1,293 ft³/s (36.62 m³/s),

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,360 ft³/s (237 m³/s) May 8, 1972, gage height, 12.25 ft (3.734 m); minimum daily, 4.1 ft³/s (0.12 m³/s) Oct. 12, 1947.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,770 ft³/s (135 m³/s) Feb. 28, gage height, 9.68 ft (2.950 m); minimum, 27.5 ft³/s (0.779 m³/s) July 15, gage height, 1.31 ft (0.399 m); minimum daily, 72 ft³/s (2.04 m³/s) July 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 946 | 1310 | 1420 | 842 | 423 | 4710 | 1950 | 2110 | 945 | 1620 | 1010 | 768 |
| 2 | 957 | 1270 | 1410 | 814 | 534 | 4630 | 2520 | 2050 | 1060 | 1550 | 904 | 702 |
| 3 | 919 | 1070 | 1120 | 687 | 570 | 4440 | 2800 | 2000 | 1110 | 1480 | 782 | 701 |
| 4 | 858 | 1180 | 1420 | 685 | 538 | 4230 | 2870 | 1930 | 1030 | 1400 | 709 | 582 |
| 5 | 803 | 1150 | 1340 | 692 | 705 | 4150 | 2890 | 1790 | 958 | 1250 | 619 | 520 |
| 6 | 662 | 1180 | 1400 | 688 | 626 | 4150 | 2920 | 1530 | 940 | 1080 | 637 | 651 |
| 7 | 475 | 1210 | 1480 | 647 | 632 | 3750 | 2970 | 1330 | 1000 | 1050 | 676 | 692 |
| 8 | 573 | 1390 | 1600 | 590 | 677 | 3440 | 3000 | 1300 | 1020 | 977 | 885 | 686 |
| 9 | 527 | 1580 | 1600 | 585 | 685 | 3440 | 2980 | 1300 | 1050 | 872 | 853 | 460 |
| 10 | 437 | 1840 | 1870 | 726 | 569 | 3440 | 2930 | 1300 | 1100 | 879 | 1040 | 606 |
| 11 | 709 | 1910 | 1910 | 665 | 706 | 2780 | 2940 | 1320 | 1140 | 809 | 1110 | 837 |
| 12 | 449 | 1910 | 1860 | 650 | 846 | 2470 | 2880 | 1320 | 1120 | 750 | 1210 | 1250 |
| 13 | 703 | 1960 | 1840 | 584 | 1150 | 2320 | 2850 | 1350 | 1080 | 541 | 1180 | 1490 |
| 14 | 504 | 1990 | 1810 | 640 | 1250 | 2160 | 2820 | 1390 | 1060 | 320 | 1150 | 1550 |
| 15 | 644 | 1950 | 1750 | 622 | 1240 | 2070 | 2650 | 1510 | 1010 | 72 | 1120 | 1500 |
| 16 | 453 | 1860 | 1670 | 552 | 1240 | 1950 | 2630 | 1630 | 915 | 295 | 1180 | 1480 |
| 17 | 691 | 1780 | 1520 | 482 | 1320 | 1810 | 2570 | 1620 | 857 | 428 | 1300 | 1380 |
| 18 | 636 | 1730 | 1480 | 360 | 1520 | 1600 | 2580 | 1610 | 859 | 390 | 1470 | 1280 |
| 19 | 503 | 1680 | 1460 | 294 | 1590 | 1420 | 2650 | 1610 | 911 | 376 | 1620 | 1220 |
| 20 | 918 | 1590 | 1350 | 364 | 1930 | 1270 | 2660 | 1590 | 985 | 388 | 1580 | 1150 |
| 21 | 729 | 1530 | 1160 | 378 | 2440 | 1210 | 2640 | 1570 | 997 | 437 | 1530 | 1040 |
| 22 | 534 | 1420 | 1140 | 575 | 2840 | 1210 | 2640 | 1550 | 1000 | 539 | 1470 | 854 |
| 23 | 531 | 1410 | 1180 | 613 | 3130 | 1160 | 2600 | 1450 | 1010 | 613 | 1370 | 1080 |
| 24 | 550 | 1410 | 1200 | 548 | 3590 | 1050 | 2550 | 1390 | 1090 | 652 | 1210 | 2010 |
| 25 | 630 | 1420 | 1180 | 548 | 4090 | 984 | 2490 | 1360 | 1180 | 703 | 1090 | 2930 |
| 26 | 729 | 1430 | 1130 | 484 | 4400 | 997 | 2420 | 1510 | 1220 | 681 | 993 | 3040 |
| 27 | 1100 | 1450 | 1110 | 553 | 4640 | 1010 | 2360 | 1120 | 1360 | 636 | 929 | 3060 |
| 28 | 1220 | 1450 | 1090 | 472 | 4740 | 1020 | 2300 | 867 | 1580 | 637 | 826 | 2980 |
| 29 | 1320 | 1450 | 1070 | 504 | --- | 1050 | 2230 | 871 | 1710 | 711 | 818 | 2890 |
| 30 | 1290 | 1430 | 973 | 479 | --- | 1140 | 2160 | 871 | 1670 | 875 | 813 | 2810 |
| 31 | 1260 | --- | 839 | 533 | --- | 1420 | --- | 886 | --- | 1050 | 801 | --- |
| TOTAL | 23260 | 45940 | 43382 | 17856 | 48621 | 72481 | 79450 | 45035 | 32967 | 24061 | 32885 | 42199 |
| MEAN | 750 | 1531 | 1399 | 576 | 1736 | 2338 | 2648 | 1453 | 1099 | 776 | 1061 | 1407 |
| MAX | 1320 | 1990 | 1910 | 842 | 4740 | 4710 | 3000 | 2110 | 1710 | 1620 | 1620 | 3060 |
| MIN | 437 | 1070 | 839 | 294 | 423 | 984 | 1950 | 867 | 857 | 72 | 619 | 460 |

CAL YR 1980 TOTAL 419566 MEAN 1146 MAX 3960 MIN 36
WTR YR 1981 TOTAL 508137 MEAN 1392 MAX 4740 MIN 72

## 04267500 RAQUETTE RIVER AT SOUTH COLTON, NY

LOCATION.--Lat 44°30'42", long 74°53'00", St. Lawrence County, Hydrologic Unit 04150305, on left bank 300 ft (91 m) upstream from bridge on State Highway 56 at South Colton, 500 ft (152 m) downstream from Niagara Mohawk Power Corp. powerplant, and 0.8 mi (1.3 km) upstream from Cold Brook.

DRAINAGE AREA.--939 $mi^2$ (2,432 $km^2$).

PERIOD OF RECORD.--January 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 882.05 ft (268.849 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated 16 mi (26 km) upstream by Carry Falls Reservoir since 1953; considerable natural storage in large lakes above Piercefield. Large diurnal fluctuation caused by five powerplants.

AVERAGE DISCHARGE.--28 years, 1,755 $ft^3/s$ (49.70 $m^3/s$).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,720 $ft^3/s$ (275 $m^3/s$) May 11, 1971, gage height, 9.80 ft (2.987 m); minimum, 1.3 $ft^3/s$ (0.037 $m^3/s$) Feb. 1, 1962, Aug. 8, 1964, gage height, 1.53 ft (0.466 m); minimum daily, 4.6 $ft^3/s$ (0.13 $m^3/s$) June 2, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,950 $ft^3/s$ (168 $m^3/s$) Oct. 24, gage height, 7.73 ft (2.356 m); minimum, 15 $ft^3/s$ (0.42 $m^3/s$) Jan. 23, 24, gage height, 1.78 ft (0.543 m); minimum daily, 401 $ft^3/s$ (11.4 $m^3/s$) Aug. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1040 | 1290 | 1590 | 1700 | 729 | 3570 | 1210 | 2690 | 1670 | 1400 | 1050 | 1360 |
| 2 | 489 | 883 | 1700 | 1540 | 901 | 3580 | 1510 | 2260 | 1620 | 1540 | 867 | 1440 |
| 3 | 722 | 1520 | 1910 | 1250 | 1610 | 3970 | 1520 | 2480 | 1760 | 2070 | 1430 | 1490 |
| 4 | 1430 | 1410 | 1010 | 1900 | 870 | 4020 | 1880 | 1870 | 1680 | 1680 | 1480 | 1640 |
| 5 | 1350 | 1260 | 1620 | 1740 | 1090 | 4530 | 1310 | 2280 | 1750 | 1600 | 1000 | 1700 |
| 6 | 1610 | 1290 | 965 | 2110 | 1040 | 4570 | 1790 | 2000 | 1260 | 1440 | 1270 | 1470 |
| 7 | 1770 | 1400 | 842 | 1860 | 1280 | 5060 | 2050 | 2050 | 993 | 1850 | 1180 | 1310 |
| 8 | 1580 | 1220 | 1910 | 1700 | 1380 | 5120 | 1570 | 1710 | 1520 | 1410 | 766 | 1150 |
| 9 | 1840 | 1520 | 1210 | 1580 | 700 | 5110 | 2700 | 1940 | 1870 | 1390 | 401 | 1420 |
| 10 | 1820 | 1320 | 2560 | 1660 | 1130 | 4710 | 3490 | 1280 | 1480 | 1940 | 1370 | 1470 |
| 11 | 1300 | 2260 | 2270 | 1620 | 1240 | 3670 | 3580 | 1930 | 1580 | 1600 | 1290 | 1270 |
| 12 | 1470 | 2000 | 1460 | 1660 | 1290 | 3620 | 3520 | 1720 | 816 | 1680 | 1630 | 1400 |
| 13 | 1950 | 2360 | 2860 | 1580 | 1170 | 3610 | 3580 | 1600 | 505 | 1630 | 1260 | 1260 |
| 14 | 1840 | 2770 | 3170 | 1540 | 1140 | 3610 | 3490 | 1630 | 1680 | 1180 | 1600 | 1640 |
| 15 | 986 | 2250 | 1820 | 2030 | 1030 | 3560 | 3520 | 1570 | 1820 | 1600 | 1460 | 1460 |
| 16 | 1440 | 2020 | 2360 | 1660 | 1410 | 3610 | 3210 | 2130 | 2650 | 1410 | 1090 | 1620 |
| 17 | 2070 | 2040 | 3090 | 1170 | 1270 | 3600 | 3360 | 2330 | 2130 | 1190 | 1290 | 1670 |
| 18 | 1470 | 2460 | 2270 | 1710 | 1090 | 3610 | 3010 | 2730 | 2080 | 1300 | 1460 | 1700 |
| 19 | 1130 | 2110 | 2270 | 1460 | 1220 | 3610 | 3120 | 2470 | 2160 | 1240 | 1520 | 1620 |
| 20 | 1830 | 2070 | 2190 | 1550 | 888 | 3450 | 3230 | 1380 | 1100 | 789 | 1780 | 1260 |
| 21 | 1450 | 2090 | 1910 | 1700 | 1220 | 1800 | 3320 | 2340 | 1080 | 1380 | 1630 | 1760 |
| 22 | 1510 | 1520 | 2760 | 950 | 910 | 2740 | 2920 | 1810 | 1390 | 1370 | 1490 | 1820 |
| 23 | 1200 | 1150 | 2270 | 1370 | 1080 | 2110 | 3400 | 2000 | 1790 | 1340 | 1550 | 1790 |
| 24 | 1800 | 1990 | 2480 | 1540 | 1590 | 2560 | 3100 | 1370 | 1570 | 1710 | 1500 | 2600 |
| 25 | 601 | 1870 | 2440 | 1390 | 2100 | 1760 | 3260 | 1810 | 1620 | 436 | 1830 | 2500 |
| 26 | 768 | 1420 | 2890 | 1130 | 3280 | 1660 | 2870 | 1980 | 1610 | 599 | 1520 | 2600 |
| 27 | 578 | 957 | 2270 | 1010 | 3580 | 1600 | 3120 | 1870 | 1250 | 1030 | 1760 | 2700 |
| 28 | 1690 | 2230 | 2070 | 1280 | 3580 | 1850 | 3330 | 1540 | 1220 | 1110 | 1550 | 2900 |
| 29 | 1340 | 1690 | 2680 | 1210 | --- | 1290 | 3290 | 1660 | 1650 | 1340 | 1350 | 3200 |
| 30 | 1100 | 1050 | 2190 | 1700 | --- | 2160 | 3330 | 1640 | 1400 | 1590 | 1790 | 3100 |
| 31 | 1610 | --- | 1410 | 1380 | --- | 1550 | --- | 1040 | --- | 1610 | 1690 | --- |
| TOTAL | 42784 | 51420 | 64447 | 47680 | 39818 | 101270 | 84590 | 59110 | 46704 | 43454 | 42854 | 54320 |
| MEAN | 1380 | 1714 | 2079 | 1538 | 1422 | 3267 | 2820 | 1907 | 1557 | 1402 | 1382 | 1811 |
| MAX | 2070 | 2770 | 3170 | 2110 | 3580 | 5120 | 3580 | 2730 | 2650 | 2070 | 1830 | 3200 |
| MIN | 489 | 883 | 842 | 950 | 700 | 1290 | 1210 | 1040 | 505 | 436 | 401 | 1150 |

CAL YR 1980 TOTAL 564200 MEAN 1542 MAX 4070 MIN 43
WTR YR 1981 TOTAL 678451 MEAN 1859 MAX 5120 MIN 401

## 04268000 RAQUETTE RIVER AT RAYMONDVILLE, NY
(National stream-quality accounting network station)

LOCATION.--Lat 44°50'20", long 74°58'45", St. Lawrence County, Hydrologic Unit 04150305, on right bank 250 ft (76 m) upstream from bridge on Grant Road at Raymondville, 0.3 mi (0.5 km) downstream from Trout Brook, 0.4 mi (0.6 km) downstream from Niagara Mohawk Power Corp. powerplant, and 18.0 mi (29.0 km) upstream from mouth. Water-quality sampling site at discharge station.

DRAINAGE AREA.--1,131 $mi^2$ (2,929 $km^2$).

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1943 to current year.

GAGE.--Water-stage recorder. Datum of gage is 183.33 ft (55.879 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor. Extensive diurnal fluctuation caused by power and industrial operations. Flow regulated since 1953 by Carry Falls Reservoir, about 46 mi (74 km) upstream and by Niagara Mohawk Power Corp. powerplant, 0.4 mi (0.6 km) upstream; considerable natural storage in large lakes above Piercefield.

AVERAGE DISCHARGE.--37 years (1944-81), 2,043 $ft^3/s$ (57.86 $m^3/s$).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 $ft^3/s$ (368 $m^3/s$) Apr. 5, 1974, gage height, 8.40 ft (2.560 m); maximum gage height, 9.24 ft (2.816 m) Feb. 22, 1954 (backwater from ice); minimum discharge, 2.2 $ft^3/s$ (0.062 $m^3/s$) Sept. 18, 19, 1966; minimum daily, 7.0 $ft^3/s$ (0.20 $m^3/s$) Oct. 15, 1951; minimum gage height, 0.42 ft (0.128 m) July 13, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,810 $ft^3/s$ (193 $m^3/s$) Mar. 6, gage height, 5.66 ft (1.725 m); maximum gage height, 6.92 ft (2.109 m) Feb. 5 (backwater from ice); minimum discharge, 17 $ft^3/s$ (0.48 $m^3/s$) July 17, gage height, 0.60 ft (0.183 m); minimum daily, 197 $ft^3/s$ (5.6 $m^3/s$) July 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1120 | 1720 | 2190 | 1700 | 1300 | 4100 | 2590 | 3460 | 1700 | 1780 | 1220 | 1480 |
| 2 | 604 | 1590 | 2290 | 1600 | 1900 | 4100 | 1880 | 2980 | 1840 | 1780 | 1080 | 1720 |
| 3 | 558 | 1530 | 2640 | 1700 | 1700 | 4180 | 1890 | 2480 | 1770 | 1670 | 1310 | 1780 |
| 4 | 1350 | 1500 | 2300 | 1900 | 1600 | 3940 | 2080 | 2340 | 1790 | 1740 | 1440 | 1790 |
| 5 | 1860 | 1690 | 2000 | 1900 | 1700 | 4530 | 2100 | 2320 | 1720 | 1750 | 1470 | 1710 |
| 6 | 1900 | 1540 | 1700 | 1800 | 1800 | 5190 | 2070 | 2300 | 1780 | 1650 | 1420 | 1450 |
| 7 | 1850 | 1950 | 1260 | 1600 | 1700 | 5660 | 2040 | 2310 | 1430 | 1740 | 1460 | 1420 |
| 8 | 1700 | 2470 | 2030 | 1700 | 1500 | 5550 | 1990 | 2240 | 1520 | 1800 | 844 | 1580 |
| 9 | 1880 | 2660 | 4020 | 1900 | 1400 | 5590 | 2480 | 2110 | 1870 | 1800 | 654 | 1510 |
| 10 | 1840 | 2470 | 3700 | 2000 | 1500 | 5620 | 2760 | 1850 | 1850 | 1770 | 1390 | 1660 |
| 11 | 1850 | 2560 | 3330 | 2100 | 1600 | 4720 | 4000 | 1840 | 1830 | 1770 | 1490 | 2260 |
| 12 | 1860 | 2880 | 2800 | 2100 | 1500 | 3900 | 4040 | 1970 | 2050 | 1630 | 1610 | 2290 |
| 13 | 1840 | 3140 | 2200 | 2100 | 1400 | 3800 | 3980 | 2110 | 2320 | 1590 | 1700 | 2460 |
| 14 | 1670 | 3110 | 1800 | 2000 | 1400 | 3900 | 3980 | 2200 | 1480 | 1760 | 1740 | 2710 |
| 15 | 1850 | 2750 | 1500 | 2100 | 1500 | 4000 | 3900 | 2150 | 804 | 1790 | 1750 | 2030 |
| 16 | 2090 | 2750 | 1300 | 2100 | 1600 | 4000 | 3910 | 2120 | 1320 | 3270 | 1820 | 1780 |
| 17 | 1700 | 2660 | 1500 | 2000 | 1500 | 4000 | 3460 | 3770 | 2200 | 788 | 1790 | 1840 |
| 18 | 1860 | 2710 | 2000 | 2100 | 1500 | 4000 | 3660 | 3680 | 2660 | 197 | 1850 | 1810 |
| 19 | 1620 | 2640 | 2600 | 2100 | 1400 | 3910 | 3680 | 3240 | 1800 | 829 | 1850 | 1670 |
| 20 | 1480 | 2630 | 3000 | 2000 | 1400 | 3800 | 3590 | 1990 | 1770 | 1320 | 1790 | 1860 |
| 21 | 1720 | 2620 | 3100 | 1800 | 1300 | 3250 | 3540 | 1950 | 1430 | 1350 | 1780 | 1680 |
| 22 | 1470 | 2140 | 3100 | 1500 | 1300 | 2850 | 3610 | 2100 | 1570 | 1500 | 1780 | 1780 |
| 23 | 1710 | 1690 | 3000 | 1400 | 1400 | 2740 | 3610 | 2150 | 2010 | 1380 | 1770 | 2040 |
| 24 | 1860 | 1920 | 2800 | 1500 | 1900 | 2350 | 3710 | 2130 | 1930 | 1470 | 1760 | 2900 |
| 25 | 1300 | 2410 | 2800 | 1300 | 2600 | 2160 | 3890 | 2100 | 1900 | 801 | 1740 | 3050 |
| 26 | 918 | 2340 | 3000 | 1200 | 3700 | 2180 | 3840 | 2080 | 1830 | 582 | 1750 | 3500 |
| 27 | 1710 | 2150 | 3100 | 1000 | 4200 | 2050 | 3600 | 1910 | 1710 | 1190 | 1670 | 3490 |
| 28 | 1910 | 2090 | 3000 | 1100 | 4100 | 2050 | 3560 | 1820 | 1300 | 1420 | 1750 | 4070 |
| 29 | 1700 | 2190 | 3000 | 1200 | --- | 2050 | 3560 | 1820 | 1550 | 1500 | 1600 | 4070 |
| 30 | 1560 | 2220 | 1800 | 1100 | --- | 2020 | 3620 | 1820 | 1800 | 1370 | 1740 | 3940 |
| 31 | 1710 | --- | 1700 | 1100 | --- | 2150 | --- | 1830 | --- | 1430 | 1750 | --- |
| TOTAL | 50050 | 68720 | 76560 | 52700 | 51400 | 114340 | 96620 | 71170 | 52534 | 46417 | 48768 | 67330 |
| MEAN | 1615 | 2291 | 2470 | 1700 | 1836 | 3688 | 3221 | 2296 | 1751 | 1497 | 1573 | 2244 |
| MAX | 2090 | 3140 | 4020 | 2100 | 4200 | 5660 | 4040 | 3770 | 2660 | 3270 | 1850 | 4070 |
| MIN | 558 | 1500 | 1260 | 1000 | 1300 | 2020 | 1880 | 1820 | 804 | 197 | 654 | 1420 |

CAL YR 1980 TOTAL 683375 MEAN 1867 MAX 5350 MIN 305
WTR YR 1981 TOTAL 796609 MEAN 2182 MAX 5660 MIN 197

## 04268000 RAQUETTE RIVER AT RAYMONDVILLE, NY--Continued

### WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955, 1957, 1960-61, 1969-72, 1979 to current year.
CHEMICAL DATA: 1955 (a), 1957 (a), 1960-61 (e), 1969 (a), 1970 (d), 1971 (b), 1972 (a), 1979-80 (d), 1981 (c).
MINOR ELEMENTS DATA: 1969 (a), 1970, 1979 (b), 1980 (d), 1981 (b).
PESTICIDE DATA: 1970 (a).
ORGANIC DATA: OC--1979-80 (d), 1981 (c).
NUTRIENT DATA: 1955 (a), 1957 (a), 1960-61 (e), 1969 (a), 1970 (d), 1971 (b), 1972 (a), 1979-80 (d), 1981 (c).
BIOLOGICAL DATA:
  Bacteria--1969-71 (a), 1979-80 (d), 1981 (c).
  Phytoplankton--1979-80 (c), 1981 (b).
  Periphyton--1979-80 (b).
SEDIMENT DATA: 1979 (c), 1980 (d), 1981 (c).

REVISIONS.--Records of specific conductance, April to September 1979, and water temperatures, October 1959 to September 1961, April to September 1979, previously published are unreliable and should not be used.

### WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS (CFS) | SPE-CIFIC CON-DUCT-ANCE (UMHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | TUR-BID-ITY (NTU) | BARO-METRIC PRES-SURE (MM OF HG) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) | STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) | HARD-NESS (MG/L AS CACO3) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NOV 26... | 1000 | 2330 | 70 | 7.2 | 2.0 | .40 | 775 | 13.2 | 94 | 270 | 61 | 28 |
| FEB 02... | 1100 | 2220 | 45 | 6.4 | .5 | .60 | 760 | 13.5 | 96 | 54 | 45 | 19 |
| MAR 18... | 1130 | 3560 | 42 | 7.2 | .5 | .70 | 750 | 12.7 | 92 | 48 | K9 | 18 |
| MAY 11... | 1415 | 1810 | 48 | 7.3 | 13.5 | 3.0 | 760 | 8.0 | 79 | 42 | K10 | 20 |
| JUL 07... | 1030 | 1740 | 39 | 6.0 | 24.5 | .90 | 760 | 7.1 | 87 | 300 | 45 | 17 |
| SEP 15... | 0945 | 2180 | 41 | 6.2 | 18.0 | 1.5 | 760 | 9.1 | 97 | 120 | 63 | 32 |

| DATE | HARD-NESS NONCAR-BONATE (MG/L AS CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | ALKA-LINITY LAB (MG/L AS CACO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| NOV 26... | 10 | 7.4 | 2.4 | 1.9 | .6 | 18 | 8.0 | 2.6 | .1 | 5.4 | 56 |
| FEB 02... | 4.0 | 5.0 | 1.6 | 1.7 | .5 | 15 | 8.7 | 2.3 | <.1 | 7.6 | 37 |
| MAR 18... | 2.0 | 4.7 | 1.4 | 1.6 | .5 | 16 | 6.8 | 1.6 | <.1 | 6.7 | 38 |
| MAY 11... | 9.0 | 5.4 | 1.5 | 1.7 | .4 | 11 | 7.2 | 1.6 | <.1 | 4.6 | 32 |
| JUL 07... | 10 | 4.9 | 1.2 | 1.6 | .5 | 7.0 | 6.1 | 1.4 | <.1 | 3.9 | 33 |
| SEP 15... | 10 | 8.8 | 2.3 | 1.7 | .6 | 22 | 8.6 | 2.1 | <.1 | 4.4 | 57 |

K Results based on colony count outside the acceptable range (non-ideal colony count).

## 04268000 RAQUETTE RIVER AT RAYMONDVILLE, NY--Continued

### WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) | NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) | NITRO- GEN, ORGANIC TOTAL (MG/L AS N) | NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) | NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) | NITRO- GEN, TOTAL (MG/L AS N) | NITRO- GEN DIS- SOLVED (MG/L AS N) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| NOV | | | | | | | | | | | |
| 26... | 40 | .22 | .20 | .010 | .020 | .22 | .14 | .23 | .16 | .45 | .36 |
| FEB | | | | | | | | | | | |
| 02... | 38 | .29 | .30 | .070 | .080 | .23 | .16 | .30 | .24 | .59 | .54 |
| MAR | | | | | | | | | | | |
| 18... | 35 | .47 | .49 | .040 | .070 | .18 | -- | .22 | <.10 | .69 | -- |
| MAY | | | | | | | | | | | |
| 11... | 31 | .39 | .40 | .030 | .080 | .48 | .41 | .51 | .49 | .90 | .89 |
| JUL | | | | | | | | | | | |
| 07... | 25 | .26 | .26 | .020 | .020 | .51 | .25 | .53 | .27 | .79 | .53 |
| SEP | | | | | | | | | | | |
| 15... | 43 | .19 | .19 | .030 | .030 | .16 | -- | .19 | <.10 | .38 | -- |

| DATE | PHOS- PHORUS, TOTAL (MG/L AS P) | PHOS- PHORUS, DIS- SOLVED (MG/L AS P) | ARSENIC TOTAL (UG/L AS AS) | ARSENIC DIS- SOLVED (UG/L AS AS) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) | BARIUM, DIS- SOLVED (UG/L AS BA) | CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) | CADMIUM DIS- SOLVED (UG/L AS CD) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) | CHRO- MIUM, DIS- SOLVED (UG/L AS CR) | COBALT, TOTAL RECOV- ERABLE (UG/L AS CO) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| NOV | | | | | | | | | | | |
| 26... | .010 | .010 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB | | | | | | | | | | | |
| 02... | .020 | .030 | 1 | 1 | 100 | 30 | 0 | <1 | 20 | 10 | 0 |
| MAR | | | | | | | | | | | |
| 18... | .020 | <.010 | 0 | 0 | 100 | 100 | 0 | 0 | 10 | <10 | 0 |
| MAY | | | | | | | | | | | |
| 11... | .020 | <.010 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUL | | | | | | | | | | | |
| 07... | <.010 | <.010 | 1 | 0 | 100 | 30 | 1 | <1 | 10 | 10 | 1 |
| SEP | | | | | | | | | | | |
| 15... | .010 | <.010 | 2 | 1 | 100 | 100 | 1 | 1 | 20 | 10 | 2 |

| DATE | COBALT, DIS- SOLVED (UG/L AS CO) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) | COPPER, DIS- SOLVED (UG/L AS CU) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) | IRON, DIS- SOLVED (UG/L AS FE) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) | LEAD, DIS- SOLVED (UG/L AS PB) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) | MERCURY DIS- SOLVED (UG/L AS HG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| NOV | | | | | | | | | | | |
| 26... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB | | | | | | | | | | | |
| 02... | 0 | 3 | 1 | 230 | 150 | 2 | 0 | 40 | 10 | .2 | <.1 |
| MAR | | | | | | | | | | | |
| 18... | 0 | 4 | 1 | 190 | 80 | 8 | 3 | 30 | 20 | .3 | .3 |
| MAY | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUL | | | | | | | | | | | |
| 07... | 1 | 2 | 1 | 190 | 100 | 11 | 1 | 30 | 10 | .1 | <.1 |
| SEP | | | | | | | | | | | |
| 15... | 1 | 3 | 1 | 400 | 160 | 7 | 3 | 20 | 10 | .1 | <.1 |

## 04268000 RAQUETTE RIVER AT RAYMONDVILLE, NY--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) | NICKEL, DIS-SOLVED (UG/L AS NI) | SELE-NIUM, TOTAL (UG/L AS SE) | SELE-NIUM, DIS-SOLVED (UG/L AS SE) | SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) | SILVER, DIS-SOLVED (UG/L AS AG) | ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) | ZINC, DIS-SOLVED (UG/L AS ZN) | CARBON, ORGANIC TOTAL (MG/L AS C) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) | CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| NOV<br>26... | -- | -- | -- | -- | -- | -- | -- | -- | 7.4 | -- | -- |
| FEB<br>02... | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 20 | -- | 14 | .4 |
| MAR<br>18... | 3 | 3 | 0 | 0 | 0 | 0 | 40 | 20 | -- | 10 | -- |
| MAY<br>11... | -- | -- | -- | -- | -- | -- | -- | -- | 4.0 | -- | -- |
| JUL<br>07... | 1 | 3 | 0 | 0 | 0 | 0 | 50 | 5 | -- | 4.4 | -- |
| SEP<br>15... | 3 | <1 | <1 | <1 | <1 | <1 | 40 | <10 | -- | 7.2 | -- |

| DATE | TIME | SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) | SAMP-LING DEPTH (FT) | DEPTH AT SAMPLE LOC-ATION, TOTAL (FEET) | SPE-CIFIC CON-DUCT-ANCE (UMHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) |
|---|---|---|---|---|---|---|---|---|
| MAR<br>18... | 1200 | 250 | -- | -- | 50 | 6.2 | 1.5 | 13.6 |
| 18... | 1204 | 230 | -- | -- | 50 | 7.4 | 1.5 | 13.8 |
| 18... | 1208 | 210 | -- | -- | 50 | 6.5 | 1.5 | 13.6 |
| 18... | 1212 | 190 | -- | -- | 50 | 6.3 | 1.5 | 13.7 |
| 18... | 1216 | 170 | -- | -- | 50 | 6.2 | 1.5 | 13.6 |
| 18... | 1220 | 150 | -- | -- | 50 | 6.0 | 1.5 | 13.6 |
| 18... | 1224 | 130 | -- | -- | 50 | 6.0 | 1.5 | 13.6 |
| 18... | 1228 | 110 | -- | -- | 50 | 6.1 | 1.5 | 13.6 |
| 18... | 1232 | 90 | -- | -- | 51 | 9.4 | 1.5 | 13.6 |
| 18... | 1236 | 70 | -- | -- | 55 | 8.4 | 1.5 | 13.6 |
| 18... | 1238 | 50 | -- | -- | 85 | 7.7 | 1.5 | 13.5 |
| 18... | 1240 | 30 | -- | -- | 124 | 7.8 | 1.5 | 13.5 |
| JUL<br>30... | 1110 | 260 | 2.5 | 3.00 | 53 | 6.2 | 20.5 | 9.3 |
| 30... | 1115 | 260 | 1.0 | 3.00 | 52 | 6.4 | 20.5 | 8.7 |
| 30... | 1118 | 220 | 2.5 | 3.00 | 52 | 6.4 | 20.5 | 9.0 |
| 30... | 1120 | 220 | 1.0 | 3.00 | 52 | 6.5 | 20.5 | 8.6 |
| 30... | 1122 | 180 | 2.7 | 3.20 | 52 | 6.5 | 20.5 | 8.9 |
| 30... | 1125 | 180 | 1.0 | 3.20 | 51 | 6.5 | 20.5 | 8.7 |
| 30... | 1128 | 140 | 4.0 | 4.50 | 52 | 6.4 | 20.5 | 8.6 |
| 30... | 1130 | 140 | 1.0 | 4.50 | 52 | 6.5 | 20.5 | 8.6 |
| 30... | 1138 | 100 | 1.5 | 2.00 | 52 | 6.5 | 20.5 | 9.1 |
| 30... | 1140 | 100 | 1.0 | 2.00 | 52 | 6.5 | 20.5 | 8.7 |
| 30... | 1148 | 60 | 3.2 | 3.70 | 52 | 6.4 | 20.5 | 9.0 |
| 30... | 1150 | 60 | 1.0 | 3.70 | 52 | 6.5 | 20.5 | 8.5 |
| 30... | 1152 | 20 | 2.5 | 3.00 | 60 | 6.5 | 20.5 | 8.5 |
| 30... | 1155 | 20 | 1.0 | 3.00 | 60 | 6.8 | 20.5 | 8.6 |

## SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS (CFS) | SEDI-MENT, SUS-PENDED (MG/L) | SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) | DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS (CFS) | SEDI-MENT, SUS-PENDED (MG/L) | SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) |
|---|---|---|---|---|---|---|---|---|---|
| NOV<br>26... | 1000 | 2330 | 2 | 13 | MAY<br>11... | 1415 | 1810 | 7 | 34 |
| FEB<br>02... | 1100 | 2220 | 2 | 12 | JUL<br>07... | 1030 | 1740 | 2 | 9.4 |
| MAR<br>18... | 1130 | 3560 | 1 | 9.6 | SEP<br>15... | 0945 | 2180 | 2 | 12 |

## 04268000 RAQUETTE RIVER AT RAYMONDVILLE, NY--Continued

## QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

### PHYTOPLANKTON

| | | | | | |
|---|---|---|---|---|---|
| DATE | NOV 26,80 | MAR 18,81 | MAY 11,81 | JUL 7,81 | SEP 15,81 |
| TIME | 1000 | 1130 | 1415 | 1030 | 0945 |
| TOTAL CELLS/ML | 39 | 350 | 260 | 77 | 98 |
| DIVERSITY: DIVISION | 1.6 | 0.6 | 0.3 | 0.7 | 1.0 |
| .CLASS | 1.6 | 0.6 | 0.3 | 0.7 | 1.0 |
| ..ORDER | 1.6 | 0.7 | 0.6 | 0.7 | 1.4 |
| ...FAMILY | 1.6 | 0.7 | 0.6 | 1.3 | 2.5 |
| ....GENUS | 1.6 | 0.7 | 0.6 | 1.3 | 2.5 |

| ORGANISM | CELLS /ML | PER-CENT | CELLS /ML | PER-CENT | CELLS /ML | PER-CENT | CELLS /ML | PER-CENT | CELLS /ML | PER-CENT |
|---|---|---|---|---|---|---|---|---|---|---|
| CHLOROPHYTA (GREEN ALGAE) | | | | | | | | | | |
| .CHLOROPHYCEAE | | | | | | | | | | |
| ..CHLOROCOCCALES | | | | | | | | | | |
| ...MICRACTINIACEAE | | | | | | | | | | |
| ....MICRACTINIUM | -- | - | 13 | 4 | -- | - | -- | - | -- | - |
| ...OOCYSTACEAE | | | | | | | | | | |
| ....ANKISTRODESMUS | 13# | 33 | -- | - | -- | - | -- | - | 28# | 29 |
| ...SCENEDESMACEAE | | | | | | | | | | |
| ....SCENEDESMUS | -- | - | -- | - | -- | - | -- | - | 14 | 14 |
| ..VOLVOCALES | | | | | | | | | | |
| ...CHLAMYDOMONADACEAE | | | | | | | | | | |
| ....CHLAMYDOMONAS | -- | - | 13 | 4 | -- | - | -- | - | -- | - |
| CHRYSOPHYTA | | | | | | | | | | |
| .BACILLARIOPHYCEAE | | | | | | | | | | |
| ..CENTRALES | | | | | | | | | | |
| ...COSCINODISCACEAE | | | | | | | | | | |
| ....CYCLOTELLA | 13# | 33 | -- | - | -- | - | -- | - | 14 | 14 |
| ....STEPHANODISCUS | -- | - | -- | - | 13 | 5 | -- | - | -- | - |
| ..PENNALES | | | | | | | | | | |
| ...ACHNANTHACEAE | | | | | | | | | | |
| ....COCCONEIS | -- | - | -- | - | -- | - | -- | - | 14 | 14 |
| ...CYMBELLACEAE | | | | | | | | | | |
| ....CYMBELLA | -- | - | -- | - | -- | - | -- | - | 14 | 14 |
| ...FRAGILARIACEAE | | | | | | | | | | |
| ....FRAGILARIA | -- | - | 13 | 4 | -- | - | -- | - | -- | - |
| ...GOMPHONEMATACEAE | | | | | | | | | | |
| ....GOMPHONEMA | -- | - | -- | - | -- | - | 13# | 17 | 14 | 14 |
| ...TABELLARIACEAE | | | | | | | | | | |
| ....TABELLARIA | -- | - | -- | - | -- | - | 52# | 67 | -- | - |
| CRYPTOPHYTA (CRYPTOMONADS) | | | | | | | | | | |
| .CRYPTOPHYCEAE | | | | | | | | | | |
| ..CRYPTOMONADALES | | | | | | | | | | |
| ...CRYPTOMONADACEAE | | | | | | | | | | |
| ....CRYPTOMONAS | -- | - | -- | - | -- | - | 13# | 17 | -- | - |
| CYANOPHYTA (BLUE-GREEN ALGAE) | | | | | | | | | | |
| .CYANOPHYCEAE | | | | | | | | | | |
| ..CHROOCOCCALES | | | | | | | | | | |
| ...CHROOCOCCACEAE | | | | | | | | | | |
| ....ANACYSTIS | -- | - | -- | - | 13 | 5 | -- | - | -- | - |
| ..HORMOGONALES | | | | | | | | | | |
| ...OSCILLATORIACEAE | | | | | | | | | | |
| ....LYNGBYA | -- | - | 310# | 89 | -- | - | -- | - | -- | - |
| ....OSCILLATORIA | -- | - | -- | - | 230# | 90 | -- | - | -- | - |
| EUGLENOPHYTA (EUGLENOIDS) | | | | | | | | | | |
| .EUGLENOPHYCEAE | | | | | | | | | | |
| ..EUGLENALES | | | | | | | | | | |
| ...EUGLENACEAE | | | | | | | | | | |
| ....TRACHELOMONAS | 13# | 33 | -- | - | -- | - | -- | - | -- | - |

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

## 04269000 ST. REGIS RIVER AT BRASHER CENTER, NY
(National stream-quality accounting network station)

**LOCATION.**--Lat 44°51'49", long 74°46'45", St. Lawrence County, Hydrologic Unit 04150306, on left bank 600 ft (183 m) upstream from highway bridge at Brasher Center, and 6.5 mi (10.5 km) downstream from West Branch. Water-quality sampling site at discharge station.

**DRAINAGE AREA.**--616 mi$^2$ (1,595 km$^2$).

### WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--August 1910 to current year. Monthly discharge only for some periods, published in WSP 1307.

**REVISED RECORDS.**--WSP 584: Drainage area. WSP 1387: 1910-16, 1917(M).

**GAGE.**--Water-stage recorder. Datum of gage is 217.23 ft (66.212 m) National Geodetic Vertical Datum of 1929. Prior to June 24, 1916, nonrecording gage at site 600 ft (183 m) downstream at different datum. June 24, 1916 to Nov. 10, 1917, and Jan. 1, 1919 to Aug. 13, 1920, nonrecording gage at present site and datum.

**REMARKS.**--Records good except those for winter periods, which are poor. Slight diurnal fluctuation caused by powerplant operations above station.

**AVERAGE DISCHARGE.**--71 years, 1,044 ft$^3$/s (29.57 m$^3$/s), 23.02 in/yr (585 mm/yr).

**EXTREMES FOR PERIOD OF RECORD.**--Maximum discharge, 16,800 ft$^3$/s (476 m$^3$/s) Apr. 6, 1937, gage height, 12.82 ft (3.908 m); maximum gage height recorded, about 15.3 ft (4.66 m) Apr. 6, 1937 (ice jam); minimum discharge observed, about 34 ft$^3$/s (0.96 m$^3$/s) Aug. 8, 1917, gage height, 5.25 ft (1.600 m); minimum daily, 37 ft$^3$/s (1.05 m$^3$/s) Aug. 8, 1917.

**EXTREMES FOR CURRENT YEAR.**--Peak discharges above base of 5,600 ft$^3$/s (159 m$^3$/s):

| Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|
| Feb. 22 | 0315 | 7,170 | 203 | 9.83 | 2.996 |

Minimum discharge, 318 ft$^3$/s (9.01 m$^3$/s) July 28, gage height, 6.00 ft (1.829 m); minimum daily, 337 ft$^3$/s (9.54 m$^3$/s) July 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 654 | 900 | 1430 | 580 | 520 | 2370 | 3180 | 1260 | 971 | 852 | 741 | 477 |
| 2 | 610 | 660 | 1400 | 580 | 600 | 2040 | 3220 | 1130 | 836 | 819 | 539 | 395 |
| 3 | 657 | 540 | 2090 | 580 | 640 | 1600 | 2970 | 994 | 686 | 691 | 453 | 420 |
| 4 | 577 | 500 | 2450 | 580 | 700 | 1710 | 2500 | 920 | 617 | 561 | 427 | 397 |
| 5 | 602 | 600 | 1720 | 600 | 720 | 1560 | 2240 | 861 | 586 | 487 | 528 | 381 |
| 6 | 620 | 800 | 1600 | 560 | 620 | 1430 | 2080 | 809 | 611 | 444 | 757 | 365 |
| 7 | 586 | 980 | 1500 | 560 | 540 | 1130 | 1810 | 831 | 692 | 444 | 848 | 354 |
| 8 | 544 | 1300 | 1400 | 540 | 470 | 1080 | 1560 | 866 | 979 | 433 | 784 | 417 |
| 9 | 497 | 1500 | 1600 | 520 | 430 | 1070 | 1410 | 729 | 1020 | 386 | 805 | 765 |
| 10 | 460 | 1700 | 2100 | 500 | 400 | 1030 | 1490 | 758 | 1070 | 406 | 1300 | 1340 |
| 11 | 451 | 1700 | 1700 | 490 | 600 | 1010 | 1520 | 689 | 965 | 495 | 1220 | 3090 |
| 12 | 456 | 1500 | 1400 | 480 | 840 | 961 | 1720 | 785 | 878 | 491 | 1670 | 3310 |
| 13 | 440 | 1400 | 1100 | 470 | 980 | 920 | 1560 | 1740 | 921 | 428 | 1530 | 3030 |
| 14 | 434 | 1500 | 1000 | 460 | 1100 | 899 | 1400 | 1550 | 705 | 423 | 1130 | 2300 |
| 15 | 419 | 1480 | 1100 | 450 | 1100 | 838 | 1390 | 1380 | 572 | 535 | 1020 | 1760 |
| 16 | 454 | 1250 | 960 | 450 | 960 | 1010 | 1350 | 2080 | 587 | 730 | 2610 | 1390 |
| 17 | 407 | 1180 | 840 | 450 | 900 | 928 | 1260 | 2130 | 772 | 674 | 4090 | 1130 |
| 18 | 419 | 913 | 800 | 440 | 3000 | 840 | 1610 | 1710 | 645 | 539 | 3610 | 1010 |
| 19 | 427 | 1230 | 740 | 430 | 5000 | 777 | 1990 | 1360 | 577 | 465 | 2450 | 931 |
| 20 | 444 | 894 | 700 | 420 | 5290 | 783 | 1870 | 1110 | 518 | 445 | 1690 | 828 |
| 21 | 440 | 910 | 680 | 410 | 5430 | 772 | 1700 | 942 | 465 | 511 | 1240 | 757 |
| 22 | 434 | 889 | 660 | 400 | 6110 | 713 | 1520 | 859 | 517 | 650 | 988 | 850 |
| 23 | 465 | 876 | 660 | 390 | 5300 | 722 | 1400 | 806 | 1140 | 666 | 874 | 1570 |
| 24 | 419 | 915 | 640 | 390 | 5620 | 756 | 1500 | 727 | 1100 | 507 | 734 | 4200 |
| 25 | 420 | 1600 | 640 | 380 | 5500 | 800 | 1760 | 637 | 942 | 436 | 660 | 3810 |
| 26 | 806 | 1760 | 620 | 380 | 4390 | 837 | 1740 | 685 | 797 | 377 | 618 | 2670 |
| 27 | 1780 | 1440 | 600 | 410 | 3300 | 1010 | 1470 | 631 | 965 | 351 | 586 | 2220 |
| 28 | 1820 | 1550 | 600 | 410 | 2440 | 1210 | 1270 | 699 | 965 | 337 | 502 | 2300 |
| 29 | 1520 | 1720 | 600 | 390 | --- | 1290 | 1200 | 731 | 775 | 462 | 514 | 2050 |
| 30 | 1300 | 1710 | 600 | 390 | --- | 2240 | 1310 | 709 | 620 | 891 | 550 | 1700 |
| 31 | 1100 | --- | 600 | 450 | --- | 3130 | --- | 858 | --- | 947 | 524 | --- |
| TOTAL | 20662 | 35897 | 34530 | 14540 | 63500 | 37466 | 53000 | 31976 | 23494 | 16883 | 35992 | 46217 |
| MEAN | 667 | 1197 | 1114 | 469 | 2268 | 1209 | 1767 | 1031 | 783 | 545 | 1161 | 1541 |
| MAX | 1820 | 1760 | 2450 | 600 | 6110 | 3130 | 3220 | 2130 | 1140 | 947 | 4090 | 4200 |
| MIN | 407 | 500 | 600 | 380 | 400 | 713 | 1200 | 631 | 465 | 337 | 427 | 354 |
| CFSM | 1.08 | 1.94 | 1.81 | .76 | 3.68 | 1.96 | 2.87 | 1.67 | 1.27 | .89 | 1.89 | 2.50 |
| IN. | 1.25 | 2.17 | 2.09 | .88 | 3.83 | 2.26 | 3.20 | 1.93 | 1.42 | 1.02 | 2.17 | 2.79 |

CAL YR 1980 TOTAL 306481 MEAN 837 MAX 4170 MIN 224 CFSM 1.36 IN 18.51
WTR YR 1981 TOTAL 414157 MEAN 1135 MAX 6110 MIN 337 CFSM 1.84 IN 25.01

## 04269000 ST. REGIS RIVER AT BRASHER CENTER, NY--Continued

### WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955, 1960, 1970-72, 1974 to current year.
CHEMICAL DATA: 1955 (a), 1960 (b), 1970-72 (a), 1975-81 (d).
MINOR ELEMENTS DATA: 1975, 1977-79 (b), 1980 (c), 1981 (b).
ORGANIC DATA: OC--1974 (b), 1978-81 (d).
NUTRIENT DATA: 1970-71 (a), 1975-81 (d).
BIOLOGICAL DATA:
Bacteria--1975-81 (d).
Phytoplankton--1975-77 (d), 1978-81 (c).
Periphyton--1975-80 (b).
SEDIMENT DATA: 1975 (d), 1976-77 (c), 1978-81 (d).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: September 1974 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum daily, 29.0°C Aug. 4, 1975; minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum daily, 23.0°C on several days during July; minimum daily, freezing point on many days during winter period.

### WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS (CFS) | SPE-CIFIC CON-DUCT-ANCE (UMHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | TUR-BID-ITY (NTU) | BARO-METRIC PRES-SURE (MM OF HG) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) | STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) | HARD-NESS (MG/L AS CACO3) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 06... | 1000 | 615 | 76 | 7.4 | 11.5 | .80 | -- | -- | -- | K10 | 22 | 36 |
| NOV 13... | 1130 | 1520 | 55 | 7.4 | .0 | .70 | 760 | 13.4 | 92 | 83 | 28 | 23 |
| DEC 08... | 1000 | 1320 | 69 | 7.2 | .0 | .90 | 760 | 14.0 | 96 | 64 | K12 | 26 |
| JAN 05... | 1100 | 600 | 83 | 7.1 | .0 | 1.0 | -- | 13.0 | 87 | 490 | K17 | 35 |
| FEB 03... | 1130 | 615 | 91 | 6.5 | .0 | .90 | 760 | 13.3 | 94 | K53 | 580 | 38 |
| MAR 18... | 1000 | 950 | 72 | 7.3 | .5 | .60 | 750 | 12.6 | 91 | 140 | K33 | 36 |
| APR 22... | 1130 | 1490 | 54 | 7.2 | 6.0 | 3.9 | 765 | 9.8 | 80 | K3 | K6 | -- |
| MAY 13... | 1200 | 1830 | 97 | 7.7 | 12.0 | 4.0 | 755 | 10.4 | 100 | K1500 | 590 | 44 |
| JUN 08... | 1230 | 1000 | 79 | 7.3 | 19.0 | .70 | 750 | 8.3 | 93 | 230 | 87 | 34 |
| JUL 06... | 1030 | 440 | 65 | 6.6 | 25.0 | 1.4 | 755 | 7.3 | 90 | K50 | 67 | 30 |
| AUG 12... | 1245 | 1770 | 54 | 6.7 | 21.5 | 3.0 | 760 | 7.9 | 89 | 340 | 320 | 29 |
| SEP 14... | 1115 | 2320 | 38 | 6.3 | 15.5 | 1.5 | 755 | 9.3 | 94 | 170 | 290 | 25 |

| DATE | HARD-NESS NONCAR-BONATE (MG/L AS CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | ALKA-LINITY LAB (MG/L AS CACO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 06... | 10 | 9.4 | 3.1 | 1.6 | .5 | 26 | 7.5 | 2.1 | .1 | 7.0 | 71 |
| NOV 13... | 9.0 | 5.9 | 2.0 | 1.2 | .4 | 14 | 7.9 | 1.4 | .1 | 7.1 | 54 |
| DEC 08... | 9.0 | 6.7 | 2.3 | 1.3 | .4 | 17 | 11 | 1.6 | .1 | 8.0 | 57 |
| JAN 05... | -- | 9.0 | 3.0 | 2.0 | .5 | -- | 9.7 | 2.2 | .0 | 10 | 64 |
| FEB 03... | 13 | 7.0 | 5.1 | 2.0 | .7 | 25 | 8.7 | 3.2 | <.1 | 17 | 65 |
| MAR 18... | 12 | 9.1 | 3.2 | 1.9 | .6 | 24 | 7.7 | 1.7 | <.1 | 9.0 | 61 |
| APR 22... | -- | -- | -- | -- | .7 | 18 | 7.8 | 1.8 | .1 | -- | 61 |
| MAY 13... | 12 | 11 | 3.9 | 1.9 | .5 | 32 | 6.8 | 1.7 | <.1 | 4.6 | 59 |
| JUN 08... | 13 | 8.7 | 2.9 | 1.8 | .5 | 21 | 6.3 | 1.7 | <.1 | 5.3 | 53 |
| JUL 06... | 9.0 | 8.2 | 2.4 | 1.7 | .5 | 21 | 5.5 | 1.7 | <.1 | 5.4 | 57 |
| AUG 12... | 10 | 7.7 | 2.3 | 1.4 | .4 | 19 | 6.8 | 1.6 | <.1 | 6.9 | 69 |
| SEP 14... | 8.0 | 6.0 | 2.4 | 1.1 | .4 | 17 | 9.4 | 1.7 | .1 | 5.6 | 59 |

K Results based on colony count outside the acceptable range (non-ideal colony count).

### 04269000 ST. REGIS RIVER AT BRASHER CENTER, NY--Continued

### WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) | NITRO-GEN, ORGANIC TOTAL (MG/L AS N) | NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) | NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) | NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) | NITRO-GEN, TOTAL (MG/L AS N) | NITRO-GEN DIS-SOLVED (MG/L AS N) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT<br>06... | 48 | .25 | .09 | .010 | .000 | .31 | .22 | .32 | .22 | .57 | .31 |
| NOV<br>13... | 35 | .23 | .22 | .050 | .040 | .18 | .12 | .23 | .16 | .46 | .38 |
| DEC<br>08... | 43 | .37 | .35 | .000 | .000 | .39 | .17 | .39 | .17 | .76 | .52 |
| JAN<br>05... | — | .42 | .47 | .010 | .040 | .32 | .24 | .33 | .28 | .75 | .75 |
| FEB<br>03... | 61 | .45 | .43 | .060 | .060 | .35 | .23 | .41 | .29 | .86 | .72 |
| MAR<br>18... | 49 | .36 | .38 | .020 | .040 | .20 | .18 | .22 | .22 | .58 | .60 |
| APR<br>22... | — | .43 | .37 | .060 | .080 | .44 | ,60 | .50 | .68 | .93 | 1.1 |
| MAY<br>13... | 50 | .15 | .14 | .030 | .030 | .56 | .46 | .59 | .49 | .74 | .63 |
| JUN<br>08... | 40 | .13 | .13 | .030 | .020 | .39 | .29 | .42 | .31 | .55 | .44 |
| JUL<br>06... | 38 | .08 | .08 | .020 | .010 | .57 | .34 | .59 | .35 | .67 | .43 |
| AUG<br>12... | 40 | .13 | .13 | .020 | .030 | .57 | .29 | .59 | .32 | .72 | .45 |
| SEP<br>14... | 37 | .09 | .12 | .020 | .030 | .40 | .30 | .42 | .33 | .51 | .45 |

| DATE | PHOS-PHORUS, TOTAL (MG/L AS P) | PHOS-PHORUS, DIS-SOLVED (MG/L AS P) | ARSENIC TOTAL (UG/L AS AS) | ARSENIC DIS-SOLVED (UG/L AS AS) | BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) | BARIUM, DIS-SOLVED (UG/L AS BA) | CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) | CADMIUM DIS-SOLVED (UG/L AS CD) | CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) | CHRO-MIUM, DIS-SOLVED (UG/L AS CR) | COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT<br>06... | .030 | .010 | 1 | 1 | 100 | 20 | 0 | 0 | 40 | <10 | 0 |
| NOV<br>13... | .030 | .010 | — | — | — | — | — | — | — | — | — |
| DEC<br>08... | .050 | .010 | — | — | — | — | — | — | — | — | — |
| JAN<br>05... | .010 | .010 | 2 | 1 | 100 | 20 | 1 | 1 | 10 | 10 | 0 |
| FEB<br>03... | .020 | .040 | — | — | — | — | — | — | — | — | — |
| MAR<br>18... | <.010 | <.010 | — | — | — | — | — | — | — | — | — |
| APR<br>22... | .050 | .020 | — | 1 | — | — | — | — | — | 10 | — |
| MAY<br>13... | .030 | <.010 | — | — | — | — | — | — | — | — | — |
| JUN<br>08... | .020 | .010 | — | — | — | — | — | — | — | — | — |
| JUL<br>06... | <.010 | .010 | — | — | — | — | — | — | — | — | — |
| AUG<br>12... | .030 | .020 | 1 | 1 | <50 | 20 | 1 | <1 | 10 | <10 | <1 |
| SEP<br>14... | .030 | .030 | — | — | — | — | — | — | — | — | — |

## STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

## 04269000 ST. REGIS RIVER AT BRASHER CENTER, NY--Continued

### WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | COBALT, DIS-SOLVED (UG/L AS CO) | COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) | COPPER, DIS-SOLVED (UG/L AS CU) | IRON, TOTAL RECOV-ERABLE (UG/L AS FE) | IRON, DIS-SOLVED (UG/L AS FE) | LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) | LEAD, DIS-SOLVED (UG/L AS PB) | MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) | MERCURY DIS-SOLVED (UG/L AS HG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 06... | 0 | 0 | 2 | 450 | 280 | 2 | 0 | 20 | 10 | .3 | <.1 |
| NOV 13... | — | — | — | — | — | — | — | — | — | — | — |
| DEC 08... | — | — | — | — | — | — | — | — | — | — | — |
| JAN 05... | 0 | 7 | 4 | 380 | 140 | 9 | 8 | 20 | 5 | .2 | <.1 |
| FEB 03... | — | — | — | — | — | — | — | — | — | — | — |
| MAR 18... | — | — | — | — | — | — | — | — | — | — | — |
| APR 22... | 2 | — | 2 | — | — | — | 4 | — | — | — | — |
| MAY 13... | — | — | — | — | — | — | — | — | — | — | — |
| JUN 08... | — | — | — | — | — | — | — | — | — | — | — |
| JUL 06... | — | — | — | — | — | — | — | — | — | — | — |
| AUG 12... | <1 | 4 | 1 | 850 | 380 | 8 | <1 | 60 | 20 | .1 | <.1 |
| SEP 14... | — | — | — | — | — | — | — | — | — | — | — |

| DATE | NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) | NICKEL, DIS-SOLVED (UG/L AS NI) | SELE-NIUM, TOTAL (UG/L AS SE) | SELE-NIUM, DIS-SOLVED (UG/L AS SE) | SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) | SILVER, DIS-SOLVED (UG/L AS AG) | ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) | ZINC, DIS-SOLVED (UG/L AS ZN) | CARBON, ORGANIC TOTAL (MG/L AS C) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) | CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 06... | 3 | 1 | 0 | 0 | 0 | 0 | 10 | 3 | — | 8.8 | .6 |
| NOV 13... | — | — | — | — | — | — | — | — | 11 | — | — |
| DEC 08... | — | — | — | — | — | — | — | — | 10 | — | — |
| JAN 05... | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 10 | — | 6.1 | .7 |
| FEB 03... | — | — | — | — | — | — | — | — | 3.6 | — | — |
| MAR 18... | — | — | — | — | — | — | — | — | 4.9 | — | — |
| APR 22... | — | 1 | — | 0 | — | 0 | — | — | — | — | — |
| MAY 13... | — | — | — | — | — | — | — | — | 8.7 | — | — |
| JUN 08... | — | — | — | — | — | — | — | — | 8.4 | — | — |
| JUL 06... | — | — | — | — | — | — | — | — | 12 | — | — |
| AUG 12... | 7 | 3 | <1 | <1 | <1 | <1 | 20 | 7 | — | 12 | 1.0 |
| SEP 14... | — | — | — | — | — | — | — | — | 14 | — | — |

### SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS (CFS) | SEDI-MENT, SUS-PENDED (MG/L) | SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) |
|---|---|---|---|---|
| OCT 06... | 1000 | 615 | 2 | 3.3 |
| NOV 13... | 1130 | 1520 | 0 | .00 |
| DEC 08... | 1000 | 1320 | 39 | 139 |
| JAN 05... | 1100 | 600 | 9 | 15 |
| FEB 03... | 1130 | 615 | 3 | 5.0 |
| MAR 18... | 1000 | 950 | 2 | 5.1 |
| APR 22... | 1130 | 1490 | 2 | 8.0 |
| MAY 13... | 1200 | 1830 | 7 | 35 |
| JUN 08... | 1230 | 1000 | 5 | 13 |
| JUL 06... | 1030 | 440 | 3 | 3.6 |
| AUG 12... | 1245 | 1770 | 9 | 43 |
| SEP 14... | 1115 | 2320 | 4 | 25 |

## 04269000 ST. REGIS RIVER AT BRASHER CENTER, NY--Continued

### QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

### PHYTOPLANKTON

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DATE | NOV 13,80 | | MAR 18,81 | | MAY 13,81 | | JUN 8,81 | |
| TIME | 1130 | | 1000 | | 1200 | | 1230 | |
| TOTAL CELLS/ML | 78 | | 26 | | 280 | | 840 | |
| DIVERSITY: DIVISION | 1.3 | | 0.0 | | 0.5 | | 0.9 | |
| .CLASS | 1.3 | | 0.0 | | 0.5 | | 0.9 | |
| ..ORDER | 1.3 | | 1.0 | | 0.8 | | 1.4 | |
| ...FAMILY | 2.3 | | 1.0 | | 2.6 | | 2.7 | |
| ....GENUS | 2.3 | | 1.0 | | 2.6 | | 2.9 | |
| ORGANISM | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT |
| CHLOROPHYTA (GREEN ALGAE) | | | | | | | | |
| .CHLOROPHYCEAE | | | | | | | | |
| ..CHLOROCOCCALES | | | | | | | | |
| ...COELASTRACEAE | | | | | | | | |
| ....COELASTRUM | -- | - | -- | - | -- | - | -- | - |
| ...OOCYSTACEAE | | | | | | | | |
| ....ANKISTRODESMUS | -- | - | -- | - | -- | - | 14 | 2 |
| ...SCENEDESMACEAE | | | | | | | | |
| ....SCENEDESMUS | -- | - | -- | - | -- | - | -- | - |
| ..VOLVOCALES | | | | | | | | |
| ...CHLAMYDOMONADACEAE | | | | | | | | |
| ....CHLAMYDOMONAS | 13# | 17 | -- | - | -- | - | 70 | 8 |
| CHRYSOPHYTA | | | | | | | | |
| .BACILLARIOPHYCEAE | | | | | | | | |
| ..CENTRALES | | | | | | | | |
| ...COSCINODISCACEAE | | | | | | | | |
| ....CYCLOTELLA | -- | - | 13# | 50 | 13 | 5 | 84 | 10 |
| ....MELOSIRA | -- | - | -- | - | -- | - | -- | - |
| ..PENNALES | | | | | | | | |
| ...ACHNANTHACEAE | | | | | | | | |
| ....ACHNANTHES | 26# | 33 | 13# | 50 | 77# | 27 | 310# | 37 |
| ....COCCONEIS | -- | - | -- | - | -- | - | -- | - |
| ...CYMBELLACEAE | | | | | | | | |
| ....CYMBELLA | -- | - | -- | - | 13 | 5 | 70 | 8 |
| ...EUNOTIACEAE | | | | | | | | |
| ....EUNOTIA | -- | - | -- | - | -- | - | -- | - |
| ...FRAGILARIACEAE | | | | | | | | |
| ....ASTERIONELLA | -- | - | -- | - | -- | - | -- | - |
| ....FRAGILARIA | -- | - | -- | - | -- | - | 56 | 7 |
| ....SYNEDRA | -- | - | -- | - | 77# | 27 | 70 | 8 |
| ...GOMPHONEMATACEAE | | | | | | | | |
| ....GOMPHONEMA | -- | - | -- | - | 26 | 9 | 28 | 3 |
| ...NAVICULACEAE | | | | | | | | |
| ....NAVICULA | 13# | 17 | -- | - | -- | - | -- | - |
| ...NITZSCHIACEAE | | | | | | | | |
| ....NITZSCHIA | 13# | 17 | -- | - | 52# | 18 | 56 | 7 |
| CYANOPHYTA (BLUE-GREEN ALGAE) | | | | | | | | |
| .CYANOPHYCEAE | | | | | | | | |
| ..CHROOCOCCALES | | | | | | | | |
| ...CHROOCOCCACEAE | | | | | | | | |
| ....ANACYSTIS | 13# | 17 | -- | - | 13 | 5 | 84 | 10 |
| ....GOMPHOSPHAERIA | -- | - | -- | - | -- | - | -- | - |
| ..HORMOGONALES | | | | | | | | |
| ...NOSTOCACEAE | | | | | | | | |
| ....ANABAENA | -- | - | -- | - | -- | - | -- | - |
| ...RIVULARIACEAE | | | | | | | | |
| ....RAPHIDIOPSIS | -- | - | -- | - | -- | - | -- | - |
| EUGLENOPHYTA (EUGLENOIDS) | | | | | | | | |
| .EUGLENOPHYCEAE | | | | | | | | |
| ..EUGLENALES | | | | | | | | |
| ...EUGLENACEAE | | | | | | | | |
| ....EUGLENA | -- | - | -- | - | 13 | 5 | -- | - |
| ....TRACHELOMONAS | -- | - | -- | - | -- | - | -- | - |

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

## 04269000 ST. REGIS RIVER AT BRASHER CENTER, NY--Continued

## QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

### PHYTOPLANKTON

| DATE | JUL 6,81 | AUG 12,81 | SEP 14,81 |
|---|---|---|---|
| TIME | 1030 | 1245 | 1115 |
| TOTAL CELLS/ML | 450 | 560 | 1700 |
| DIVERSITY: DIVISION | 1.2 | 0.7 | 0.8 |
| .CLASS | 1.2 | 0.7 | 0.8 |
| ..ORDER | 2.1 | 1.1 | 1.6 |
| ...FAMILY | 2.2 | 2.2 | 1.8 |
| ....GENUS | 2.3 | 2.7 | 1.8 |

| ORGANISM | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT |
|---|---|---|---|---|---|---|
| CHLOROPHYTA (GREEN ALGAE) | | | | | | |
| .CHLOROPHYCEAE | | | | | | |
| ..CHLOROCOCCALES | | | | | | |
| ...COELASTRACEAE | | | | | | |
| ....COELASTRUM | -- | - | 110# | 20 | -- | - |
| ...OOCYSTACEAE | | | | | | |
| ....ANKISTRODESMUS | 13 | 3 | -- | - | 14 | 1 |
| ...SCENEDESMACEAE | | | | | | |
| ....SCENEDESMUS | 26 | 6 | -- | - | 56 | 3 |
| ..VOLVOCALES | | | | | | |
| ...CHLAMYDOMONADACEAE | | | | | | |
| ....CHLAMYDOMONAS | -- | - | -- | - | 28 | 2 |
| CHRYSOPHYTA | | | | | | |
| .BACILLARIOPHYCEAE | | | | | | |
| ..CENTRALES | | | | | | |
| ...COSCINODISCACEAE | | | | | | |
| ....CYCLOTELLA | 13 | 3 | 14 | 2 | 14 | 1 |
| ....MELOSIRA | 26 | 6 | 41 | 7 | -- | - |
| ..PENNALES | | | | | | |
| ...ACHNANTHACEAE | | | | | | |
| ....ACHNANTHES | 26 | 6 | -- | - | 70 | 4 |
| ....COCCONEIS | -- | - | 68 | 12 | -- | - |
| ...CYMBELLACEAE | | | | | | |
| ....CYMBELLA | -- | - | -- | - | -- | - |
| ...EUNOTIACEAE | | | | | | |
| ....EUNOTIA | -- | - | -- | - | 14 | 1 |
| ...FRAGILARIACEAE | | | | | | |
| ....ASTERIONELLA | -- | - | 55 | 10 | 28 | 2 |
| ....FRAGILARIA | -- | - | 41 | 7 | -- | - |
| ....SYNEDRA | -- | - | 68 | 12 | -- | - |
| ...GOMPHONEMATACEAE | | | | | | |
| ....GOMPHONEMA | -- | - | -- | - | -- | - |
| ...NAVICULACEAE | | | | | | |
| ....NAVICULA | -- | - | -- | - | 28 | 2 |
| ...NITZSCHIACEAE | | | | | | |
| ....NITZSCHIA | 13 | 3 | 160# | 29 | 28 | 2 |
| CYANOPHYTA (BLUE-GREEN ALGAE) | | | | | | |
| .CYANOPHYCEAE | | | | | | |
| ..CHROOCOCCALES | | | | | | |
| ...CHROOCOCCACEAE | | | | | | |
| ....ANACYSTIS | 100# | 23 | -- | - | -- | - |
| ....GOMPHOSPHAERIA | -- | - | -- | - | 1100# | 60 |
| ..HORMOGONALES | | | | | | |
| ...NOSTOCACEAE | | | | | | |
| ....ANABAENA | 220# | 49 | -- | - | -- | - |
| ...RIVULARIACEAE | | | | | | |
| ....RAPHIDIOPSIS | -- | - | -- | - | 410# | 23 |
| EUGLENOPHYTA (EUGLENOIDS) | | | | | | |
| .EUGLENOPHYCEAE | | | | | | |
| ..EUGLENALES | | | | | | |
| ...EUGLENACEAE | | | | | | |
| ....EUGLENA | -- | - | -- | - | -- | - |
| ....TRACHELOMONAS | 13 | 3 | -- | - | -- | - |

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

## 04269000 ST. REGIS RIVER AT BRASHER CENTER, NY--Continued

### TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

(ONCE-DAILY)

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 11.0 | 2.0 | .0 | .0 | .0 | .0 | 9.0 | 8.0 | 19.5 | 21.5 | 19.5 | 21.5 |
| 2 | 11.0 | 2.0 | .0 | .0 | .0 | .0 | 9.0 | 9.5 | 19.5 | 21.5 | 19.0 | 20.0 |
| 3 | 11.0 | 2.0 | .0 | .0 | .0 | .0 | 9.0 | 11.0 | 19.5 | 22.0 | 19.5 | 20.0 |
| 4 | 11.0 | 2.5 | .0 | .0 | .0 | .0 | 8.0 | 12.5 | 19.0 | 22.0 | 20.0 | 19.5 |
| 5 | 10.5 | 2.5 | .0 | .0 | .0 | .0 | 8.0 | 12.0 | 19.0 | 22.0 | 20.5 | 19.5 |
| 6 | 10.0 | 2.5 | .0 | .0 | .0 | .0 | 8.0 | 12.0 | 19.0 | 23.0 | 20.5 | 20.0 |
| 7 | 10.0 | 3.0 | .0 | .0 | .0 | .0 | 7.5 | 11.0 | 19.0 | 23.0 | 20.0 | 20.0 |
| 8 | 10.0 | 3.0 | .0 | .0 | .0 | .0 | 7.5 | 11.0 | 19.0 | 22.5 | 20.0 | 19.5 |
| 9 | 10.0 | 2.0 | .0 | .0 | .0 | .0 | 7.5 | 11.5 | 19.0 | 22.5 | 20.0 | 19.0 |
| 10 | 10.0 | 1.5 | .0 | .0 | .0 | .0 | 7.0 | 11.5 | 19.5 | 22.5 | 20.0 | 18.0 |
| 11 | 10.0 | 1.0 | .0 | .0 | .0 | .0 | 7.5 | 11.5 | 19.5 | 22.5 | 20.0 | 17.5 |
| 12 | 10.0 | 1.0 | .0 | .0 | .0 | .0 | 7.0 | 11.5 | 19.5 | 22.5 | 20.0 | 18.0 |
| 13 | 10.0 | .0 | .0 | .0 | .0 | .0 | 6.5 | 11.0 | 18.5 | 22.5 | 19.5 | 17.0 |
| 14 | 10.5 | .0 | .0 | .0 | .0 | .0 | 6.0 | 10.5 | 18.5 | 23.0 | 19.5 | 16.0 |
| 15 | 11.0 | .0 | .0 | .0 | .0 | .0 | 6.0 | 10.5 | 19.0 | 23.0 | 16.5 | 15.5 |
| 16 | 10.5 | .0 | .0 | .0 | .0 | .0 | 6.0 | 11.0 | 19.0 | 22.0 | 16.5 | 15.0 |
| 17 | 11.0 | .0 | .0 | .0 | .0 | .0 | 6.5 | 13.0 | 19.5 | 22.5 | 15.0 | 15.0 |
| 18 | 11.0 | 1.0 | .0 | .0 | .0 | 1.0 | 6.5 | 13.0 | 20.0 | 22.5 | 18.0 | 16.0 |
| 19 | 10.0 | 1.0 | .0 | .0 | .0 | 1.0 | 7.0 | 13.0 | 20.0 | 23.0 | 19.0 | 15.5 |
| 20 | 10.0 | 1.0 | .0 | .0 | .0 | 2.0 | 7.0 | 15.0 | 20.0 | 23.0 | 19.5 | 15.0 |
| 21 | 9.5 | .0 | .0 | .0 | .0 | 2.5 | 7.5 | 15.5 | 20.5 | 22.5 | 20.0 | 15.0 |
| 22 | 9.0 | .0 | .0 | .0 | .0 | 2.5 | 7.5 | 16.0 | 20.5 | 22.0 | 20.0 | 14.0 |
| 23 | 9.0 | .0 | .0 | .0 | .0 | 3.0 | 7.0 | 18.0 | 20.5 | 23.0 | 20.0 | 13.5 |
| 24 | 8.0 | .0 | .0 | .0 | .0 | 4.0 | 7.0 | 18.5 | 20.5 | 23.0 | 20.0 | 13.0 |
| 25 | 6.0 | .0 | .0 | .0 | .0 | 4.0 | 7.0 | 19.0 | 21.0 | 23.0 | 21.0 | 13.0 |
| 26 | 4.0 | .0 | .0 | .0 | .0 | 4.0 | 7.0 | 19.0 | 21.0 | 22.5 | 21.0 | 13.0 |
| 27 | 3.0 | .0 | .0 | .0 | .0 | 4.5 | 7.0 | 20.0 | 21.0 | 22.5 | 21.0 | 13.0 |
| 28 | --- | .0 | .0 | .0 | .0 | 5.0 | 7.5 | 20.0 | 21.5 | 21.0 | 21.5 | 13.0 |
| 29 | 2.0 | .0 | .0 | .0 | --- | 6.0 | 7.5 | 20.0 | 21.5 | 21.0 | 21.5 | 12.5 |
| 30 | 2.0 | .0 | .0 | .0 | --- | 7.5 | 8.0 | 19.5 | 21.5 | 20.0 | 21.5 | 12.5 |
| 31 | 1.5 | --- | .0 | .0 | --- | 8.5 | --- | 19.5 | --- | 19.5 | --- | --- |
| MEAN | 9.0 | 1.0 | .0 | .0 | .0 | 2.0 | 7.5 | 14.0 | 20.0 | 22.0 | 19.5 | 16.5 |

## 04270000 SALMON RIVER AT CHASM FALLS, NY

LOCATION.—Lat 44°45'22", long 74°13'09", Franklin County, Hydrologic Unit 04150307, on right bank 0.1 mi (0.2 km) downstream from Niagara Mohawk Power Corp. powerplant at Chasm Falls, and 3.0 mi (4.8 km) downstream from Duane Stream.

DRAINAGE AREA.—132 $mi^2$ (342 $km^2$).

PERIOD OF RECORD.—July 1925 to current year.

REVISED RECORDS.—WSP 729: 1931 (m). WSP 759: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 1,011.52 ft (308.311 m) National Geodetic Vertical Datum of 1929.

REMARKS.—Records good except those for winter periods, which are fair. Seasonal regulation of flow by upstream reservoirs. Diurnal fluctuation at low and medium flow caused by powerplant. A small diversion from tributary stream above station is used as water supply for village of Malone.

AVERAGE DISCHARGE.—56 years, 227 $ft^3/s$ (6.429 $m^3/s$).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,890 $ft^3/s$ (81.8 $m^3/s$) Apr. 25, 1926, gage height, 5.0 ft (1.52 m); minimum, 9.8 $ft^3/s$ (0.28 $m^3/s$) Sept. 26, 27, 1963, minimum daily, 28 $ft^3/s$ (0.79 $m^3/s$) Sept. 4, 1934.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 1,280 $ft^3/s$ (36.2 $m^3/s$) Feb. 22, gage height, 3.35 ft (1.021 m); minimum, 20 $ft^3/s$ (0.57 $m^3/s$) July 28, gage height, 0.49 ft (0.149 m); minimum daily, 92 $ft^3/s$ (2.61 $m^3/s$) Oct. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 139 | 198 | 195 | 153 | 111 | 397 | 819 | 234 | 193 | 659 | 157 | 144 |
| 2 | 141 | 185 | 197 | 153 | 128 | 339 | 822 | 218 | 178 | 420 | 139 | 134 |
| 3 | 150 | 167 | 299 | 152 | 137 | 282 | 724 | 206 | 163 | 252 | 129 | 129 |
| 4 | 153 | 162 | 230 | 145 | 163 | 258 | 606 | 196 | 167 | 205 | 126 | 128 |
| 5 | 168 | 280 | 290 | 144 | 161 | 247 | 517 | 186 | 194 | 178 | 437 | 129 |
| 6 | 141 | 319 | 340 | 136 | 156 | 242 | 431 | 197 | 175 | 226 | 573 | 120 |
| 7 | 133 | 308 | 370 | 138 | 143 | 232 | 353 | 234 | 343 | 175 | 371 | 120 |
| 8 | 125 | 528 | 470 | 134 | 133 | 224 | 305 | 199 | 307 | 147 | 313 | 119 |
| 9 | 118 | 549 | 605 | 134 | 125 | 217 | 293 | 183 | 276 | 165 | 354 | 165 |
| 10 | 117 | 488 | 762 | 130 | 123 | 213 | 311 | 174 | 240 | 553 | 367 | 211 |
| 11 | 115 | 428 | 560 | 128 | 154 | 200 | 276 | 178 | 206 | 475 | 325 | 515 |
| 12 | 112 | 358 | 500 | 129 | 222 | 178 | 326 | 205 | 198 | 248 | 397 | 591 |
| 13 | 98 | 306 | 450 | 122 | 291 | 186 | 251 | 305 | 190 | 185 | 283 | 620 |
| 14 | 94 | 287 | 420 | 121 | 269 | 172 | 236 | 267 | 171 | 208 | 236 | 378 |
| 15 | 92 | 261 | 390 | 132 | 245 | 179 | 245 | 237 | 169 | 309 | 335 | 317 |
| 16 | 93 | 230 | 370 | 115 | 215 | 190 | 227 | 240 | 165 | 237 | 862 | 251 |
| 17 | 94 | 187 | 350 | 115 | 210 | 166 | 224 | 272 | 161 | 185 | 1110 | 227 |
| 18 | 98 | 220 | 330 | 117 | 310 | 173 | 333 | 243 | 156 | 159 | 1100 | 254 |
| 19 | 115 | 249 | 310 | 115 | 439 | 170 | 375 | 217 | 144 | 159 | 701 | 192 |
| 20 | 99 | 252 | 300 | 112 | 709 | 168 | 313 | 199 | 131 | 198 | 462 | 196 |
| 21 | 118 | 237 | 280 | 114 | 1070 | 167 | 283 | 177 | 132 | 219 | 358 | 194 |
| 22 | 110 | 230 | 260 | 115 | 1210 | 167 | 288 | 161 | 153 | 215 | 293 | 234 |
| 23 | 111 | 214 | 248 | 117 | 1090 | 160 | 271 | 177 | 204 | 172 | 170 | 422 |
| 24 | 112 | 169 | 214 | 114 | 1020 | 164 | 281 | 176 | 164 | 148 | 157 | 770 |
| 25 | 110 | 321 | 186 | 114 | 927 | 166 | 321 | 189 | 145 | 136 | 174 | 728 |
| 26 | 199 | 245 | 182 | 117 | 744 | 173 | 306 | 184 | 144 | 125 | 177 | 542 |
| 27 | 336 | 200 | 184 | 118 | 552 | 162 | 266 | 124 | 210 | 163 | 141 | 506 |
| 28 | 264 | 225 | 173 | 119 | 408 | 171 | 242 | 175 | 170 | 110 | 150 | 532 |
| 29 | 225 | 249 | 167 | 115 | --- | 244 | 238 | 173 | 147 | 254 | 151 | 442 |
| 30 | 197 | 223 | 167 | 114 | --- | 612 | 253 | 185 | 190 | 253 | 154 | 360 |
| 31 | 188 | --- | 153 | 110 | --- | 820 | --- | 258 | --- | 187 | 145 | --- |
| TOTAL | 4365 | 8275 | 9952 | 3892 | 11465 | 7439 | 10736 | 6369 | 5586 | 7325 | 10847 | 9670 |
| MEAN | 141 | 276 | 321 | 126 | 409 | 240 | 358 | 205 | 186 | 236 | 350 | 322 |
| MAX | 336 | 549 | 762 | 153 | 1210 | 820 | 822 | 305 | 343 | 659 | 1110 | 770 |
| MIN | 92 | 162 | 153 | 110 | 111 | 160 | 224 | 124 | 131 | 110 | 126 | 119 |

CAL YR 1980 TOTAL 72021 MEAN 197 MAX 892 MIN 90
WTR YR 1981 TOTAL 95921 MEAN 263 MAX 1210 MIN 92

## 04270200 LITTLE SALMON RIVER AT BOMBAY, NY

LOCATION.--Lat 44°56'24", long 74°33'24", Franklin County, Hydrologic Unit 04150307, on right bank 50 ft (15 m) downstream from bridge on road to Fort Covington Center, 0.5 mi (0.8 km) east of village of Bombay, and 7.2 mi (11.6 km) upstream from mouth.

DRAINAGE AREA.--93.6 $mi^2$ (242 $km^2$).

PERIOD OF RECORD.--August to November 1957, July 1958 to current year. Occasional low-flow measurements, water years 1954-55, 1957.

GAGE.--Water-stage recorder. Datum of gage is 173.91 ft (53.008 m) National Geodetic Vertical Datum of 1929. August to November 1957, at site 100 ft (30 m) upstream at datum 0.72 ft (0.219 m) higher.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--23 years (1958-81), 118 $ft^3/s$ (3.342 $m^3/s$), 17.12 in/yr (435 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,250 $ft^3/s$ (92.0 $m^3/s$) Apr. 4, 1974, gage height, 12.90 ft (3.932 m); minimum, 8.0 $ft^3/s$ (0.23 $m^3/s$) Aug. 6, 7, 1965, gage height, 1.52 ft (0.463 m); minimum gage height, 0.85 ft (0.259 m) Sept. 2, 1957, site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 $ft^3/s$ (25 $m^3/s$) and maximum (*):

| Date | Time | Discharge ($ft^3/s$) | Discharge ($m^3/s$) | Gage height (ft) | Gage height (m) | Date | Time | Discharge ($ft^3/s$) | Discharge ($m^3/s$) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Dec. 9 | 1100 | *2,480 | 70.2 | *11.17 | 3.405 | Aug. 17 | 1830 | 1,580 | 44.7 | 8.93 | 2.722 |
| Feb. 12 | 0430 | ice jam | | 9.23 | 2.813 | Sept. 13 | 0200 | 1,090 | 30.9 | 7.33 | 2.234 |
| Feb. 20 | 1700 | ice jam | | 8.02 | 2.444 | Sept. 24 | 0930 | 1,780 | 50.4 | 9.50 | 2.896 |

Minimum discharge, 22.1 $ft^3/s$ (0.62 $m^3/s$) Oct. 9, gage height, 1.66 ft (0.506 m).

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 27 | 46 | 159 | 52 | 36 | 307 | 341 | 136 | 100 | 400 | 46 | 47 |
| 2 | 26 | 43 | 192 | 52 | 41 | 251 | 353 | 107 | 92 | 165 | 37 | 44 |
| 3 | 26 | 40 | 345 | 50 | 45 | 196 | 258 | 93 | 76 | 87 | 32 | 43 |
| 4 | 31 | 38 | 227 | 50 | 54 | 160 | 184 | 84 | 68 | 71 | 35 | 42 |
| 5 | 42 | 42 | 210 | 49 | 60 | 163 | 166 | 78 | 58 | 56 | 245 | 40 |
| 6 | 39 | 59 | 230 | 48 | 56 | 155 | 147 | 76 | 56 | 44 | 442 | 39 |
| 7 | 35 | 112 | 245 | 48 | 52 | 152 | 121 | 90 | 70 | 38 | 155 | 38 |
| 8 | 31 | 305 | 320 | 47 | 49 | 155 | 104 | 93 | 120 | 34 | 95 | 41 |
| 9 | 27 | 243 | 1960 | 47 | 64 | 150 | 95 | 83 | 170 | 37 | 180 | 65 |
| 10 | 26 | 209 | 800 | 46 | 80 | 154 | 121 | 75 | 160 | 333 | 409 | 156 |
| 11 | 24 | 161 | 682 | 45 | 94 | 147 | 134 | 72 | 90 | 133 | 237 | 609 |
| 12 | 26 | 120 | 494 | 45 | 110 | 140 | 221 | 129 | 68 | 68 | 383 | 362 |
| 13 | 25 | 98 | 350 | 44 | 130 | 136 | 161 | 377 | 67 | 52 | 168 | 610 |
| 14 | 24 | 117 | 270 | 44 | 140 | 131 | 121 | 184 | 62 | 82 | 105 | 168 |
| 15 | 26 | 153 | 220 | 43 | 130 | 109 | 115 | 128 | 60 | 294 | 211 | 103 |
| 16 | 24 | 102 | 190 | 43 | 120 | 182 | 112 | 140 | 60 | 143 | 927 | 79 |
| 17 | 23 | 71 | 160 | 42 | 400 | 128 | 105 | 218 | 57 | 76 | 1250 | 69 |
| 18 | 24 | 75 | 150 | 42 | 540 | 110 | 203 | 177 | 54 | 59 | 565 | 74 |
| 19 | 24 | 83 | 130 | 41 | 580 | 98 | 275 | 120 | 42 | 51 | 212 | 72 |
| 20 | 25 | 68 | 110 | 41 | 600 | 94 | 170 | 100 | 37 | 47 | 147 | 65 |
| 21 | 27 | 68 | 94 | 41 | 640 | 86 | 155 | 92 | 35 | 86 | 120 | 61 |
| 22 | 27 | 72 | 80 | 40 | 620 | 86 | 158 | 82 | 42 | 87 | 106 | 69 |
| 23 | 27 | 76 | 74 | 40 | 531 | 102 | 150 | 74 | 90 | 60 | 92 | 495 |
| 24 | 26 | 86 | 68 | 40 | 385 | 128 | 149 | 68 | 86 | 46 | 87 | 1620 |
| 25 | 29 | 312 | 62 | 40 | 516 | 156 | 292 | 64 | 54 | 39 | 91 | 769 |
| 26 | 74 | 218 | 58 | 42 | 422 | 152 | 292 | 72 | 52 | 35 | 81 | 263 |
| 27 | 158 | 131 | 56 | 43 | 282 | 198 | 179 | 68 | 86 | 34 | 74 | 235 |
| 28 | 112 | 160 | 54 | 41 | 232 | 238 | 132 | 72 | 72 | 34 | 64 | 385 |
| 29 | 79 | 218 | 52 | 40 | --- | 181 | 126 | 78 | 49 | 49 | 48 | 194 |
| 30 | 61 | 205 | 56 | 39 | --- | 331 | 174 | 84 | 40 | 87 | 60 | 137 |
| 31 | 51 | --- | 54 | 38 | --- | 418 | --- | 90 | --- | 66 | 55 | --- |
| TOTAL | 1226 | 3731 | 8152 | 1363 | 7009 | 5194 | 5314 | 3404 | 2173 | 2893 | 6759 | 6994 |
| MEAN | 39.5 | 124 | 263 | 44.0 | 250 | 168 | 177 | 110 | 72.4 | 93.3 | 218 | 233 |
| MAX | 158 | 312 | 1960 | 52 | 640 | 418 | 353 | 377 | 170 | 400 | 1250 | 1620 |
| MIN | 23 | 38 | 52 | 38 | 36 | 86 | 95 | 64 | 35 | 34 | 32 | 38 |
| CFSM | .42 | 1.33 | 2.81 | .47 | 2.67 | 1.80 | 1.89 | 1.18 | .77 | 1.00 | 2.33 | 2.49 |
| IN. | .49 | 1.48 | 3.24 | .54 | 2.79 | 2.06 | 2.11 | 1.35 | .86 | 1.15 | 2.69 | 2.78 |

CAL YR 1980 TOTAL 36117 MEAN 98.7 MAX 1960 MIN 16 CFSM 1.05 IN 14.35
WTR YR 1981 TOTAL 54212 MEAN 149 MAX 1960 MIN 23 CFSM 1.59 IN 21.55

## 04270510 CHATEAUGAY RIVER BELOW CHATEAUGAY, NY

LOCATION.--Lat 44°57'49", long 74°07'53", Franklin County, Hydrologic Unit 04150307, on left bank 10 ft (3 m) downstream from bridge on Sam Cook Road, 0.2 mi (0.3 km) downstream from Marble River, 2.4 mi (3.9 km) upstream from international boundary, and 4.1 mi (6.6 km) northeast of Chateaugay.

DRAINAGE AREA.--151 mi$^2$ (391 km$^2$).

PERIOD OF RECORD.--December 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 411.33 ft (125.373 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Flow regulated at Forge Dam on Upper and Lower Chateaugay Lakes.

AVERAGE DISCHARGE.--15 years (1967-81), 249 ft$^3$/s (7.052 m$^3$/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,200 ft$^3$/s (147 m$^3$/s) Apr. 4, 1974, gage height, 7.33 ft (2.234 m), from rating curve extended above 1,600 ft$^3$/s (45.3 m$^3$/s); maximum gage height, 10.99 ft (3,350 m) Feb. 11, 1966 (ice jam); minimum discharge, 37 ft$^3$/s (1.05 m$^3$/s) Aug. 22, 23, 24, 26, 27, 1979, gage height, 2.56 ft (0.780 m); minimum daily, 37 ft$^3$/s (1.05 m$^3$/s) Aug. 23, 26, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,750 ft$^3$/s (49.6 m$^3$/s) Aug. 17, gage height, 5.50 ft (1.68 m), result of regulation, maximum gage height, 6.50 ft$^3$/s (1.98 m) Feb. 11 (ice jam); minimum, 64 ft$^3$/s (1.81 m$^3$/s) Oct. 1-4, gage height, 2.74 ft (0.835 m); minimum daily, 64 ft$^3$/s (1.81 m$^3$/s) Oct. 1.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 64 | 350 | 267 | 190 | 150 | 579 | 331 | 279 | 234 | 224 | 100 | 117 |
| 2 | 66 | 400 | 291 | 180 | 140 | 503 | 384 | 275 | 231 | 165 | 102 | 117 |
| 3 | 66 | 380 | 379 | 180 | 160 | 434 | 335 | 265 | 228 | 151 | 112 | 119 |
| 4 | 71 | 370 | 279 | 170 | 170 | 402 | 343 | 241 | 237 | 146 | 104 | 114 |
| 5 | 71 | 369 | 300 | 170 | 180 | 351 | 355 | 224 | 224 | 143 | 165 | 112 |
| 6 | 67 | 376 | 350 | 170 | 190 | 335 | 340 | 205 | 224 | 138 | 143 | 112 |
| 7 | 82 | 433 | 430 | 160 | 170 | 316 | 330 | 159 | 237 | 133 | 228 | 112 |
| 8 | 94 | 486 | 579 | 160 | 170 | 312 | 320 | 149 | 218 | 114 | 355 | 114 |
| 9 | 94 | 486 | 639 | 150 | 190 | 308 | 310 | 143 | 241 | 165 | 439 | 119 |
| 10 | 93 | 492 | 370 | 150 | 210 | 304 | 310 | 141 | 224 | 143 | 463 | 170 |
| 11 | 93 | 459 | 325 | 150 | 230 | 301 | 310 | 143 | 212 | 131 | 416 | 205 |
| 12 | 93 | 433 | 320 | 150 | 250 | 297 | 320 | 149 | 218 | 128 | 372 | 196 |
| 13 | 93 | 428 | 320 | 150 | 260 | 293 | 310 | 151 | 209 | 131 | 308 | 265 |
| 14 | 93 | 428 | 310 | 140 | 240 | 286 | 300 | 143 | 205 | 143 | 297 | 316 |
| 15 | 94 | 398 | 300 | 140 | 260 | 293 | 290 | 143 | 215 | 124 | 389 | 293 |
| 16 | 93 | 351 | 300 | 140 | 300 | 293 | 280 | 151 | 193 | 108 | 612 | 265 |
| 17 | 94 | 320 | 290 | 130 | 370 | 286 | 270 | 162 | 179 | 106 | 1140 | 247 |
| 18 | 94 | 303 | 280 | 130 | 430 | 286 | 270 | 151 | 141 | 106 | 539 | 231 |
| 19 | 93 | 267 | 280 | 130 | 470 | 279 | 290 | 184 | 136 | 106 | 498 | 228 |
| 20 | 93 | 248 | 270 | 130 | 470 | 268 | 310 | 215 | 133 | 114 | 503 | 218 |
| 21 | 93 | 245 | 270 | 140 | 486 | 268 | 320 | 244 | 133 | 117 | 523 | 199 |
| 22 | 92 | 241 | 260 | 140 | 475 | 265 | 310 | 237 | 154 | 108 | 508 | 209 |
| 23 | 106 | 237 | 260 | 140 | 542 | 268 | 300 | 237 | 159 | 104 | 468 | 508 |
| 24 | 130 | 260 | 250 | 150 | 599 | 272 | 300 | 234 | 141 | 102 | 420 | 911 |
| 25 | 114 | 316 | 240 | 150 | 660 | 279 | 330 | 237 | 136 | 102 | 380 | 695 |
| 26 | 105 | 263 | 230 | 160 | 632 | 279 | 320 | 244 | 157 | 98 | 275 | 639 |
| 27 | 101 | 279 | 230 | 170 | 605 | 308 | 300 | 237 | 162 | 100 | 170 | 738 |
| 28 | 100 | 283 | 220 | 180 | 586 | 265 | 290 | 247 | 138 | 98 | 126 | 724 |
| 29 | 145 | 325 | 210 | 180 | --- | 339 | 297 | 244 | 133 | 112 | 126 | 674 |
| 30 | 204 | 279 | 200 | 170 | --- | 316 | 286 | 254 | 202 | 110 | 119 | 566 |
| 31 | 274 | --- | 190 | 160 | --- | 304 | --- | 251 | --- | 102 | 114 | --- |
| TOTAL | 3165 | 10505 | 9439 | 4810 | 9595 | 9889 | 9361 | 6339 | 5654 | 3872 | 10514 | 9533 |
| MEAN | 102 | 350 | 304 | 155 | 343 | 319 | 312 | 204 | 188 | 125 | 339 | 318 |
| MAX | 274 | 492 | 639 | 190 | 660 | 579 | 384 | 279 | 241 | 224 | 1140 | 911 |
| MIN | 64 | 237 | 190 | 130 | 140 | 265 | 270 | 141 | 133 | 98 | 100 | 112 |

CAL YR 1980 TOTAL 71316 MEAN 195 MAX 1000 MIN 64
WTR YR 1981 TOTAL 92676 MEAN 254 MAX 1140 MIN 64

## 04273500 SARANAC RIVER AT PLATTSBURGH, NY

LOCATION.--Lat 44°40'54", long 73°28'18", Clinton County, Hydrologic Unit 02010006, on right bank at Plattsburgh, 600 ft (183 m) downstream from Imperial Paper and Color Corp. dam, 3.0 mi (4.8 km) upstream from mouth, and 5.5 mi (8.8 km) downstream from Mead Brook.

DRAINAGE AREA.--608 mi² (1,575 km²). Prior to September 1930, 607 mi² (1,572 km²).

PERIOD OF RECORD.--March 1903 to September 1930, October 1943 to current year. Published as "near Plattsburgh," 1903-30.

REVISED RECORDS.--WSP 345: Drainage area. WSP 384: 1909-10 (monthly discharge only). WSP 1387: 1907-8. WSP 1437: 1908 (minimum daily only).

GAGE.--Water-stage recorder. Datum of gage is 155.74 ft (47.470 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 12, 1919, nonrecording gage and Nov. 12, 1919 to Sept. 30, 1930, water-stage recorder, at site 1.5 mi (2.4 km) upstream at different datum.

REMARKS.--Records good except those for winter periods, which are fair. Considerable diurnal fluctuation caused by power and industrial operations. Slight regulation by storage in Upper and Lower Saranac Lakes and elsewhere. During year, city of Plattsburgh diverted an average of 8.37 ft³/s (0.237 m³/s) from Saranac River and Mead and West Brooks, tributaries above station, for municipal supply. About 1 ft³/s (0.028 m³/s) diverted from Great Chazy River basin into Saranac River for water supply of State Institutions at Dannemora.

AVERAGE DISCHARGE.--65 years, 833 ft³/s (23.59 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 ft³/s (326 m³/s) Apr. 8, 1928, from computation of flow over dam and through waste gates and powerplant; minimum daily, 3.6 ft³/s (0.102 m³/s) June 26, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,760 ft³/s (106 m³/s) Feb. 24, gage height, 6.66 ft (2.030 m); minimum gage height, 1.63 ft (0.497 m) July 9; minimum daily discharge, 117 ft³/s (3.313 m³/s) Sept. 8.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 649 | 678 | 973 | 620 | 421 | 1640 | 2120 | 1080 | 633 | 536 | 506 | 509 |
| 2 | 610 | 744 | 801 | 580 | 453 | 1520 | 2460 | 969 | 596 | 551 | 516 | 467 |
| 3 | 599 | 638 | 1090 | 680 | 476 | 1380 | 2350 | 874 | 553 | 578 | 474 | 470 |
| 4 | 593 | 500 | 834 | 560 | 520 | 1280 | 2030 | 840 | 550 | 497 | 530 | 458 |
| 5 | 649 | 362 | 795 | 450 | 566 | 1200 | 1940 | 757 | 514 | 491 | 497 | 449 |
| 6 | 621 | 610 | 738 | 400 | 615 | 1220 | 1820 | 709 | 481 | 503 | 499 | 453 |
| 7 | 655 | 769 | 776 | 480 | 577 | 1190 | 1630 | 799 | 623 | 458 | 507 | 240 |
| 8 | 525 | 1040 | 916 | 540 | 500 | 1130 | 1480 | 869 | 835 | 377 | 539 | 117 |
| 9 | 744 | 1290 | 1610 | 460 | 599 | 1080 | 1390 | 826 | 770 | 287 | 522 | 258 |
| 10 | 632 | 1310 | 1540 | 450 | 540 | 1060 | 1440 | 766 | 927 | 449 | 522 | 401 |
| 11 | 515 | 1170 | 1210 | 440 | 556 | 1050 | 1410 | 726 | 861 | 465 | 499 | 645 |
| 12 | 520 | 1130 | 966 | 430 | 732 | 1000 | 1490 | 864 | 725 | 523 | 492 | 934 |
| 13 | 481 | 1070 | 1020 | 430 | 834 | 927 | 1400 | 1120 | 735 | 476 | 524 | 1010 |
| 14 | 476 | 1010 | 923 | 440 | 1060 | 913 | 1320 | 857 | 656 | 478 | 607 | 906 |
| 15 | 476 | 951 | 814 | 470 | 959 | 892 | 1310 | 795 | 647 | 491 | 562 | 816 |
| 16 | 430 | 937 | 751 | 450 | 944 | 936 | 1150 | 868 | 663 | 500 | 950 | 785 |
| 17 | 444 | 841 | 776 | 440 | 959 | 826 | 1140 | 881 | 598 | 458 | 1130 | 665 |
| 18 | 453 | 959 | 708 | 420 | 1360 | 803 | 1200 | 952 | 594 | 476 | 1110 | 750 |
| 19 | 354 | 814 | 702 | 420 | 1640 | 843 | 1390 | 871 | 579 | 513 | 923 | 741 |
| 20 | 399 | 916 | 696 | 470 | 1740 | 852 | 1430 | 785 | 581 | 304 | 843 | 647 |
| 21 | 510 | 714 | 615 | 450 | 2290 | 824 | 1370 | 776 | 572 | 217 | 726 | 589 |
| 22 | 462 | 738 | 649 | 450 | 3240 | 771 | 1290 | 704 | 523 | 340 | 666 | 859 |
| 23 | 448 | 744 | 666 | 450 | 3070 | 744 | 1210 | 681 | 628 | 515 | 710 | 1320 |
| 24 | 467 | 881 | 593 | 460 | 3080 | 763 | 1240 | 723 | 538 | 485 | 647 | 2820 |
| 25 | 510 | 980 | 789 | 470 | 3450 | 730 | 1360 | 667 | 511 | 524 | 618 | 2210 |
| 26 | 556 | 1120 | 666 | 500 | 3070 | 685 | 1320 | 632 | 597 | 448 | 575 | 1600 |
| 27 | 854 | 930 | 620 | 540 | 2230 | 571 | 1230 | 674 | 485 | 322 | 623 | 1500 |
| 28 | 1010 | 923 | 600 | 560 | 1940 | 669 | 1160 | 581 | 647 | 317 | 509 | 1530 |
| 29 | 854 | 1050 | 560 | 520 | --- | 850 | 1130 | 693 | 495 | 357 | 474 | 1440 |
| 30 | 738 | 1050 | 680 | 480 | --- | 1510 | 1150 | 744 | 569 | 480 | 520 | 1290 |
| 31 | 649 | --- | 660 | 450 | --- | 1960 | --- | 709 | --- | 538 | 459 | --- |
| TOTAL | 17883 | 26869 | 25737 | 14960 | 38421 | 31819 | 44360 | 24792 | 18686 | 13954 | 19279 | 26879 |
| MEAN | 577 | 896 | 830 | 483 | 1372 | 1026 | 1479 | 800 | 623 | 450 | 622 | 896 |
| MAX | 1010 | 1310 | 1610 | 680 | 3450 | 1960 | 2460 | 1120 | 927 | 578 | 1130 | 2820 |
| MIN | 354 | 362 | 560 | 400 | 421 | 571 | 1130 | 581 | 481 | 217 | 459 | 117 |

CAL YR 1980 TOTAL 249579 MEAN 682 MAX 1980 MIN 131
WTR YR 1981 TOTAL 303639 MEAN 832 MAX 3450 MIN 117

## 04273900 LAKE PLACID AT LAKE PLACID, NY

LOCATION.—Lat 44°17'42", long 73°59'26", Essex County, Hydrologic Unit 02010004, on south shore of East Lake on Victor Herbert Drive, and 400 ft (122 m) north of State Highway 86 in village of Lake Placid.

DRAINAGE AREA.—20.1 mi² (52.1 km²) at outlet 0.7 mi (1.1 km) northwest of gage.

PERIOD OF RECORD.—November 1959 to current year.

GAGE.—Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

EXTREMES FOR PERIOD OF RECORD.—Maximum elevation, 1,859.42 ft (566.751 m) May 3, 1972; minimum, 1,857.60 ft (566.196 m) Oct. 2, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,859.09 ft (566.651 m) Sept. 24, minimum, 1,858.01 ft (566.321 m) Feb. 1.

### ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1858.27 | 1858.27 | 1858.28 | 1858.18 | 1858.04 | 1858.53 | 1858.67 | 1858.40 | 1858.25 | 1858.26 | 1858.16 | 1858.15 |
| 2 | 1858.26 | 1858.26 | 1858.27 | 1858.17 | 1858.12 | 1858.48 | 1858.82 | 1858.38 | 1858.23 | 1858.23 | 1858.15 | 1858.13 |
| 3 | 1858.27 | 1858.24 | 1858.29 | 1858.17 | 1858.15 | 1858.45 | 1858.78 | 1858.36 | 1858.22 | 1858.21 | 1858.14 | 1858.12 |
| 4 | 1858.28 | 1858.24 | 1858.27 | 1858.16 | 1858.14 | 1858.41 | 1858.75 | 1858.34 | 1858.23 | 1858.19 | 1858.13 | 1858.11 |
| 5 | 1858.29 | 1858.30 | 1858.27 | 1858.15 | 1858.14 | 1858.37 | 1858.78 | 1858.33 | 1858.23 | 1858.19 | 1858.18 | 1858.10 |
| 6 | 1858.26 | 1858.31 | 1858.25 | 1858.15 | 1858.13 | 1858.35 | 1858.76 | 1858.33 | 1858.25 | 1858.21 | 1858.25 | 1858.09 |
| 7 | 1858.25 | 1858.34 | 1858.25 | 1858.14 | 1858.13 | 1858.34 | 1858.68 | 1858.34 | 1858.28 | 1858.20 | 1858.23 | 1858.07 |
| 8 | 1858.23 | 1858.44 | 1858.26 | 1858.13 | 1858.13 | 1858.31 | 1858.61 | 1858.32 | 1858.27 | 1858.17 | 1858.24 | 1858.07 |
| 9 | 1858.22 | 1858.49 | 1858.37 | 1858.13 | 1858.16 | 1858.30 | 1858.57 | 1858.30 | 1858.31 | 1858.17 | 1858.26 | 1858.08 |
| 10 | 1858.20 | 1858.51 | 1858.40 | 1858.12 | 1858.15 | 1858.29 | 1858.56 | 1858.29 | 1858.31 | 1858.22 | 1858.27 | 1858.12 |
| 11 | 1858.19 | 1858.49 | 1858.40 | 1858.11 | 1858.23 | 1858.28 | 1858.56 | 1858.29 | 1858.30 | 1858.20 | 1858.28 | 1858.27 |
| 12 | 1858.19 | 1858.45 | 1858.39 | 1858.11 | 1858.35 | 1858.27 | 1858.59 | 1858.31 | 1858.30 | 1858.18 | 1858.32 | 1858.29 |
| 13 | 1858.19 | 1858.42 | 1858.38 | 1858.10 | 1858.36 | 1858.26 | 1858.55 | 1858.34 | 1858.29 | 1858.17 | 1858.30 | 1858.31 |
| 14 | 1858.16 | 1858.40 | 1858.37 | 1858.09 | 1858.34 | 1858.25 | 1858.51 | 1858.34 | 1858.28 | 1858.18 | 1858.28 | 1858.30 |
| 15 | 1858.15 | 1858.38 | 1858.35 | 1858.09 | 1858.32 | 1858.24 | 1858.47 | 1858.33 | 1858.30 | 1858.21 | 1858.29 | 1858.29 |
| 16 | 1858.14 | 1858.35 | 1858.35 | 1858.08 | 1858.30 | 1858.24 | 1858.43 | 1858.36 | 1858.30 | 1858.20 | 1858.40 | 1858.27 |
| 17 | 1858.13 | 1858.33 | 1858.33 | 1858.08 | 1858.29 | 1858.24 | 1858.41 | 1858.36 | 1858.32 | 1858.18 | 1858.48 | 1858.24 |
| 18 | 1858.13 | 1858.33 | 1858.32 | 1858.08 | 1858.31 | 1858.22 | 1858.51 | 1858.35 | 1858.30 | 1858.17 | 1858.49 | 1858.23 |
| 19 | 1858.13 | 1858.31 | 1858.30 | 1858.08 | 1858.34 | 1858.21 | 1858.58 | 1858.32 | 1858.28 | 1858.17 | 1858.45 | 1858.21 |
| 20 | 1858.13 | 1858.29 | 1858.29 | 1858.07 | 1858.46 | 1858.21 | 1858.56 | 1858.31 | 1858.27 | 1858.19 | 1858.40 | 1858.19 |
| 21 | 1858.12 | 1858.27 | 1858.27 | 1858.07 | 1858.75 | 1858.20 | 1858.51 | 1858.29 | 1858.27 | 1858.22 | 1858.37 | 1858.17 |
| 22 | 1858.11 | 1858.26 | 1858.26 | 1858.06 | 1858.83 | 1858.20 | 1858.48 | 1858.28 | 1858.26 | 1858.21 | 1858.33 | 1858.22 |
| 23 | 1858.10 | 1858.25 | 1858.25 | 1858.07 | 1858.83 | 1858.19 | 1858.44 | 1858.26 | 1858.30 | 1858.18 | 1858.30 | 1858.47 |
| 24 | 1858.09 | 1858.25 | 1858.24 | 1858.07 | 1858.81 | 1858.18 | 1858.44 | 1858.25 | 1858.28 | 1858.16 | 1858.28 | 1859.04 |
| 25 | 1858.13 | 1858.30 | 1858.23 | 1858.06 | 1858.81 | 1858.19 | 1858.44 | 1858.23 | 1858.27 | 1858.14 | 1858.26 | 1858.99 |
| 26 | 1858.26 | 1858.30 | 1858.23 | 1858.06 | 1858.74 | 1858.18 | 1858.42 | 1858.24 | 1858.28 | 1858.12 | 1858.23 | 1858.86 |
| 27 | 1858.32 | 1858.29 | 1858.22 | 1858.05 | 1858.65 | 1858.18 | 1858.40 | 1858.25 | 1858.32 | 1858.13 | 1858.21 | 1858.76 |
| 28 | 1858.33 | 1858.30 | 1858.21 | 1858.05 | 1858.58 | 1858.18 | 1858.38 | 1858.26 | 1858.32 | 1858.12 | 1858.19 | 1858.69 |
| 29 | 1858.31 | 1858.29 | 1858.19 | 1858.05 | --- | 1858.18 | 1858.38 | 1858.25 | 1858.29 | 1858.17 | 1858.18 | 1858.62 |
| 30 | 1858.30 | 1858.29 | 1858.20 | 1858.04 | --- | 1858.28 | 1858.40 | 1858.25 | 1858.27 | 1858.18 | 1858.16 | 1858.54 |
| 31 | 1858.28 | --- | 1858.19 | 1858.04 | --- | 1858.57 | --- | 1858.27 | --- | 1858.16 | 1858.16 | --- |
| MEAN | 1858.21 | 1858.33 | 1858.29 | 1858.10 | 1858.38 | 1858.28 | 1858.55 | 1858.31 | 1858.28 | 1858.18 | 1858.27 | 1858.33 |
| MAX | 1858.33 | 1858.51 | 1858.40 | 1858.18 | 1858.83 | 1858.57 | 1858.82 | 1858.40 | 1858.32 | 1858.26 | 1858.49 | 1859.04 |
| MIN | 1858.09 | 1858.24 | 1858.19 | 1858.04 | 1858.04 | 1858.18 | 1858.38 | 1858.23 | 1858.22 | 1858.12 | 1858.13 | 1858.07 |

CAL YR 1980 MEAN 1858.22 MAX 1858.55 MIN 1857.93
WTR YR 1981 MEAN 1858.29 MAX 1859.04 MIN 1858.04

## 04275000 EAST BRANCH AUSABLE RIVER AT AU SABLE FORKS, NY

LOCATION.--Lat 44°26'20", long 73°40'55", Essex County, Hydrologic Unit 02010004, on left bank 700 ft (213 m) upstream from bridge on Burt Street in Au Sable Forks, and 0.5 mi (0.8 km) upstream from confluence with West Branch.

DRAINAGE AREA.--198 mi$^2$ (513 km$^2$).

PERIOD OF RECORD.--September 1924 to current year.

REVISED RECORDS.--WSP 759: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 545.37 ft (166.229 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 21, 1938, nonrecording gage at lower highway bridge in Au Sable Forks, 400 ft (122 m) upstream from confluence with West Branch at datum 3.54 ft (1.079 m) lower.

REMARKS.--Records good except those for winter periods, which are poor. Occasional regulation of storage in Upper and Lower Ausable Lakes and occasional small diurnal fluctuation, cause unknown.

AVERAGE DISCHARGE.--57 years, 310 ft$^3$/s (8.779 m$^3$/s), 21.27 in/yr (540 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,100 ft$^3$/s (569 m$^3$/s) Sept. 22, 1938, gage height, 12.91 ft (3.935 m), from rating curve extended above 5,800 ft$^3$/s (164 m$^3$/s) on basis of velocity-area studies; minimum observed, 20 ft$^3$/s (0.57 m$^3$/s) Aug. 11, 14, 28, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,700 ft$^3$/s (105 m$^3$/s) and maximum (*):

| Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) | Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 11 | 2030[a] | ice jam | | *11.70 | 3.566 | Apr. 2 | 0200 | 4,330 | 123 | 6.31 | 1.923 |
| Feb. 21 | 0200 | ice jam | | 7.98 | 2.432 | Sept. 23 | Unknown | *4,590 | 130 | 6.48 | 1.975 |

[a] About.

Minimum recorded discharge, 51 ft$^3$/s (1.444 m$^3$/s) Sept. 8, gage height 1.08 ft (0.329 m) but was estimated as less for January 13 and 14 during periods of ice effect.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 138 | 186 | 217 | 110 | 88 | 413 | 1260 | 470 | 190 | 130 | 142 | 60 |
| 2 | 123 | 167 | 202 | 100 | 94 | 336 | 2520 | 382 | 157 | 105 | 105 | 59 |
| 3 | 123 | 148 | 405 | 96 | 90 | 270 | 1050 | 324 | 144 | 94 | 108 | 59 |
| 4 | 143 | 148 | 224 | 90 | 84 | 241 | 1070 | 288 | 147 | 94 | 120 | 59 |
| 5 | 192 | 253 | 235 | 80 | 80 | 228 | 1420 | 277 | 179 | 99 | 127 | 57 |
| 6 | 165 | 273 | 225 | 72 | 94 | 212 | 1160 | 316 | 176 | 105 | 320 | 55 |
| 7 | 145 | 234 | 220 | 66 | 110 | 206 | 670 | 332 | 277 | 108 | 235 | 53 |
| 8 | 131 | 624 | 246 | 68 | 120 | 190 | 500 | 273 | 238 | 92 | 179 | 53 |
| 9 | 118 | 560 | 850 | 66 | 110 | 176 | 460 | 235 | 215 | 84 | 316 | 520 |
| 10 | 107 | 513 | 477 | 62 | 150 | 168 | 740 | 215 | 241 | 135 | 270 | 330 |
| 11 | 102 | 376 | 250 | 58 | 1200 | 162 | 480 | 537 | 188 | 88 | 196 | 1100 |
| 12 | 103 | 285 | 220 | 52 | 1400 | 157 | 780 | 2430 | 165 | 69 | 199 | 540 |
| 13 | 103 | 233 | 210 | 48 | 500 | 152 | 520 | 2080 | 149 | 63 | 162 | 390 |
| 14 | 99 | 222 | 180 | 48 | 380 | 147 | 420 | 1030 | 132 | 71 | 139 | 250 |
| 15 | 93 | 206 | 170 | 56 | 320 | 135 | 1400 | 653 | 168 | 115 | 127 | 190 |
| 16 | 88 | 179 | 170 | 58 | 320 | 165 | 460 | 581 | 185 | 105 | 437 | 180 |
| 17 | 88 | 140 | 150 | 68 | 350 | 117 | 390 | 527 | 202 | 75 | 587 | 170 |
| 18 | 92 | 169 | 140 | 74 | 420 | 142 | 560 | 427 | 202 | 66 | 465 | 130 |
| 19 | 166 | 162 | 130 | 110 | 560 | 155 | 1100 | 352 | 157 | 74 | 259 | 160 |
| 20 | 143 | 158 | 120 | 100 | 1000 | 132 | 700 | 296 | 132 | 77 | 179 | 140 |
| 21 | 126 | 170 | 100 | 92 | 1600 | 122 | 500 | 259 | 127 | 152 | 139 | 120 |
| 22 | 117 | 135 | 100 | 78 | 2000 | 115 | 380 | 231 | 120 | 218 | 112 | 130 |
| 23 | 108 | 162 | 140 | 88 | 1390 | 117 | 340 | 206 | 168 | 147 | 94 | 2400 |
| 24 | 99 | 132 | 160 | 84 | 2250 | 120 | 500 | 188 | 173 | 108 | 84 | 3400 |
| 25 | 117 | 272 | 150 | 82 | 2020 | 117 | 500 | 173 | 147 | 84 | 82 | 1500 |
| 26 | 1070 | 247 | 140 | 88 | 1030 | 122 | 450 | 176 | 565 | 71 | 74 | 740 |
| 27 | 654 | 189 | 130 | 96 | 648 | 147 | 390 | 168 | 527 | 69 | 67 | 480 |
| 28 | 400 | 224 | 120 | 92 | 470 | 147 | 350 | 188 | 328 | 96 | 66 | 480 |
| 29 | 291 | 333 | 120 | 86 | --- | 235 | 340 | 165 | 218 | 328 | 62 | 480 |
| 30 | 233 | 265 | 120 | 82 | --- | 1300 | 621 | 173 | 162 | 340 | 63 | 360 |
| 31 | 203 | --- | 110 | 78 | --- | 2160 | --- | 206 | --- | 212 | 60 | --- |
| TOTAL | 5880 | 7365 | 6431 | 2428 | 18878 | 8606 | 22031 | 14158 | 6179 | 3674 | 5575 | 14645 |
| MEAN | 190 | 246 | 207 | 78.3 | 674 | 278 | 734 | 457 | 206 | 119 | 180 | 488 |
| MAX | 1070 | 624 | 850 | 110 | 2250 | 2160 | 2520 | 2430 | 565 | 340 | 587 | 3400 |
| MIN | 88 | 132 | 100 | 48 | 80 | 115 | 340 | 165 | 120 | 63 | 60 | 53 |
| CFSM | .96 | 1.24 | 1.05 | .40 | 3.40 | 1.40 | 3.71 | 2.31 | 1.04 | .60 | .91 | 2.47 |
| IN. | 1.10 | 1.38 | 1.21 | .46 | 3.55 | 1.62 | 4.14 | 2.66 | 1.16 | .69 | 1.05 | 2.75 |

CAL YR 1980 TOTAL 88228 MEAN 241 MAX 3750 MIN 34 CFSM 1.22 IN 16.58
WTR YR 1981 TOTAL 115850 MEAN 317 MAX 3400 MIN 48 CFSM 1.60 IN 21.77

## 04276895 WEST BROOK AT LAKE GEORGE, NEW YORK

**LOCATION.**--Lat 43°25'02", long 73°42'44", Warren County, Hydrologic Unit 02010001, on right bank 0.2 mi (0.3 km) upstream of mouth. Water-quality sampling site at discharge station.

**DRAINAGE AREA.**--8.38 mi$^2$/s (21.7 km$^2$).

**PERIOD OF RECORD.**--June 1980 to current year.

**GAGE.**--Water stage recorder. Altitude of gage is 330 ft (101 m), from topographic map.

**REMARKS.**--Records fair, except discharges above 50 ft$^3$/s, which are poor. Effluent from Village of Lake George sewage treatment plant discharged to sand and gravel aquifer adjacent to West Brook, 0.6 mi (1.0 km) upstream from gage. Principal source of effluent is diversions from Lake George for municipal supply.

**COOPERATION.**--Figures of discharge supplied by Village of Lake George, New York.

**EXTREMES FOR PERIOD OF RECORD.**--Maximum discharge 301 ft$^3$/s (8.52 m$^3$/s) Feb. 20, 1981, gage height 2.91 ft (0.887 m); from rating curve extended above 50 ft$^3$/s (1.42 m$^3$/s); minimum, 5.0 ft$^3$/s (0.142 m$^3$/s) Aug. 7-8, 1980, Oct. 13-18, 1980 Nov. 3-8, 1980, gage height, 0.45 ft (0.137 m).

**EXTREMES FOR CURRENT PERIOD.**--June to September 1980: Maximum discharge during period, 73 ft$^3$/s (2.07 m$^3$/s) Aug. 30, gage height 1.46 ft (0.445 m), no peak above base of 150 ft$^3$/s (4.25 m$^3$/s); minimum, 5.0 ft$^3$/s (0.142 m$^3$/s) Aug. 7-8, gage height 0.45 ft (0.137 m).

Water year 1981: Peak discharges during period, above base of 150 ft$^3$/s (4.248 m$^3$/s) and maximum (*):

| Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) | Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. 11 | 2030 | 161 | 4.56 | 2.14 | 0.652 | Feb. 20 | 2030 | *301 | 8.52 | *2.91 | 0.887 |

Minimum discharge, 5.0 ft$^3$/s (0.142 m$^3$/s), Oct. 13-18, Nov. 3-8, gage height 0.45 ft (0.137 m).

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | --- | 8.1 | 5.2 | 6.4 |
| 2 | | | | | | | | | --- | 7.7 | 5.2 | 7.4 |
| 3 | | | | | | | | | --- | 7.4 | 5.2 | 7.1 |
| 4 | | | | | | | | | --- | 7.1 | 5.2 | 7.1 |
| 5 | | | | | | | | | --- | 7.1 | 6.1 | 7.7 |
| 6 | | | | | | | | | --- | 7.7 | 7.4 | 7.7 |
| 7 | | | | | | | | | --- | 7.1 | 5.5 | 6.4 |
| 8 | | | | | | | | | --- | 8.1 | 5.8 | 6.4 |
| 9 | | | | | | | | | --- | 7.7 | 7.1 | 6.4 |
| 10 | | | | | | | | | --- | 6.4 | 5.8 | 6.4 |
| 11 | | | | | | | | | --- | 6.4 | 5.8 | 6.4 |
| 12 | | | | | | | | | --- | 6.4 | 5.5 | 6.4 |
| 13 | | | | | | | | | 9.6 | 6.4 | 5.5 | 6.4 |
| 14 | | | | | | | | | 8.8 | 6.1 | 5.5 | 7.7 |
| 15 | | | | | | | | | 8.4 | 5.8 | 5.8 | 6.7 |
| 16 | | | | | | | | | 8.1 | 6.4 | 5.8 | 6.1 |
| 17 | | | | | | | | | 7.7 | 6.9 | 5.8 | 6.3 |
| 18 | | | | | | | | | 7.1 | 5.5 | 5.5 | 6.7 |
| 19 | | | | | | | | | 7.7 | 5.5 | 5.5 | 6.1 |
| 20 | | | | | | | | | 10 | 5.5 | 5.8 | 5.8 |
| 21 | | | | | | | | | 10 | 8.4 | 5.8 | 5.5 |
| 22 | | | | | | | | | 9.2 | 8.4 | 5.8 | 5.5 |
| 23 | | | | | | | | | 8.8 | 7.1 | 5.8 | 6.4 |
| 24 | | | | | | | | | 8.4 | 6.1 | 5.8 | 5.8 |
| 25 | | | | | | | | | 8.8 | 5.5 | 5.8 | 6.7 |
| 26 | | | | | | | | | 7.4 | 6.4 | 5.8 | 8.1 |
| 27 | | | | | | | | | 7.4 | 7.1 | 5.8 | 5.5 |
| 28 | | | | | | | | | 7.4 | 6.1 | 5.8 | 5.2 |
| 29 | | | | | | | | | 7.7 | 6.1 | 5.8 | 5.2 |
| 30 | | | | | | | | | 8.8 | 6.1 | 7.4 | 5.2 |
| 31 | | | | | | | | | --- | 5.5 | 8.1 | --- |
| TOTAL | | | | | | | | | --- | 208.1 | 182.7 | 192.7 |
| MEAN | | | | | | | | | --- | 6.71 | 5.89 | 6.42 |
| MAX | | | | | | | | | --- | 8.4 | 8.1 | 8.1 |
| MIN | | | | | | | | | --- | 5.5 | 5.2 | 5.2 |
| ♦ | | | | | | | | | 1.1 | 1.6 | 1.6 | 0.86 |

♦ Discharges, in cubic feet per second, by sewage treatment plant upstream of gage.

## 04276895 WEST BROOK AT LAKE GEORGE, NEW YORK--Continued

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.5 | 5.2 | 7.7 | 5.5 | 5.2 | 24 | 14 | 9.4 | 8.5 | 5.8 | 6.2 | 5.5 |
| 2 | 5.5 | 5.2 | 7.4 | 5.5 | 26 | 22 | 23 | 9.4 | 8.1 | 5.8 | 6.2 | 5.6 |
| 3 | 5.5 | 5.0 | 12 | 5.5 | 15 | 20 | 16 | 9.0 | 7.7 | 8.9 | 6.2 | 6.1 |
| 4 | 6.7 | 5.0 | 8.1 | 5.5 | 11 | 18 | 14 | 9.0 | 7.7 | 8.1 | 6.2 | 5.8 |
| 5 | 5.8 | 5.0 | 7.4 | 5.5 | 10 | 18 | 15 | 8.5 | 6.9 | 8.1 | 7.6 | 5.5 |
| 6 | 5.5 | 5.0 | 7.1 | 5.5 | 9.6 | 17 | 15 | 8.5 | 7.3 | 7.3 | 6.9 | 5.5 |
| 7 | 5.5 | 5.0 | 7.1 | 5.5 | 8.8 | 15 | 13 | 9.0 | 6.9 | 6.9 | 6.5 | 5.5 |
| 8 | 5.2 | 5.5 | 7.1 | 5.5 | 8.8 | 15 | 12 | 8.5 | 6.5 | 6.5 | 6.5 | 12 |
| 9 | 5.2 | 5.8 | 7.4 | 5.5 | 8.4 | 14 | 12 | 8.5 | 8.1 | 6.2 | 6.5 | 20 |
| 10 | 5.2 | 5.8 | 7.1 | 5.5 | 8.4 | 13 | 12 | 8.5 | 7.3 | 5.8 | 6.5 | 8.3 |
| 11 | 5.2 | 5.8 | 6.7 | 5.5 | 47 | 13 | 12 | 13 | 6.9 | 5.8 | 7.5 | 7.5 |
| 12 | 5.2 | 5.5 | 6.4 | 5.5 | 35 | 12 | 11 | 59 | 6.9 | 6.2 | 6.9 | 6.6 |
| 13 | 5.0 | 5.5 | 6.7 | 5.5 | 17 | 12 | 11 | 45 | 6.9 | 6.2 | 6.2 | 6.1 |
| 14 | 5.0 | 5.5 | 6.4 | 5.5 | 16 | 11 | 13 | 25 | 6.9 | 5.8 | 6.2 | 5.8 |
| 15 | 5.0 | 5.5 | 6.1 | 5.5 | 14 | 11 | 14 | 20 | 8.1 | 5.8 | 11 | 5.9 |
| 16 | 5.0 | 5.2 | 6.4 | 5.5 | 14 | 11 | 13 | 19 | 7.7 | 5.5 | 14 | 5.8 |
| 17 | 5.0 | 5.2 | 6.4 | 5.5 | 15 | 11 | 13 | 17 | 10 | 5.5 | 7.7 | 5.8 |
| 18 | 5.8 | 5.2 | 6.4 | 5.5 | 19 | 10 | 17 | 15 | 7.7 | 5.8 | 6.1 | 5.8 |
| 19 | 5.5 | 5.2 | 6.7 | 5.5 | 26 | 9.9 | 14 | 14 | 6.9 | 5.5 | 5.8 | 5.9 |
| 20 | 5.2 | 5.5 | 7.1 | 5.5 | 104 | 9.9 | 13 | 13 | 8.1 | 6.5 | 5.8 | 5.8 |
| 21 | 5.2 | 5.5 | 6.7 | 5.5 | 68 | 10 | 12 | 12 | 9.0 | 7.3 | 5.8 | 5.6 |
| 22 | 5.2 | 5.5 | 6.4 | 5.5 | 37 | 9.9 | 12 | 11 | 7.7 | 5.8 | 5.8 | 30 |
| 23 | 5.2 | 5.5 | 6.1 | 5.5 | 29 | 9.9 | 12 | 10 | 7.3 | 5.5 | 5.8 | 29 |
| 24 | 5.2 | 7.1 | 6.1 | 5.5 | 53 | 9.9 | 13 | 9.9 | 6.5 | 5.5 | 6.4 | 21 |
| 25 | 6.7 | 10 | 5.8 | 5.2 | 58 | 9.9 | 12 | 9.9 | 7.3 | 5.5 | 6.1 | 14 |
| 26 | 9.9 | 8.1 | 5.8 | 5.2 | 41 | 9.9 | 12 | 9.0 | 6.9 | 6.7 | 5.8 | 10 |
| 27 | 7.7 | 6.7 | 5.8 | 5.2 | 31 | 11 | 11 | 9.0 | 6.5 | 7.3 | 5.8 | 9.5 |
| 28 | 6.7 | 8.4 | 5.5 | 5.2 | 27 | 10 | 11 | 8.6 | 6.2 | 7.4 | 5.9 | 9.2 |
| 29 | 6.1 | 12 | 5.8 | 5.2 | --- | 10 | 11 | 8.1 | 6.2 | 9.4 | 6.0 | 8.0 |
| 30 | 5.2 | 8.4 | 5.8 | 5.2 | --- | 12 | 11 | 8.5 | 6.2 | 7.3 | 5.5 | 7.5 |
| 31 | 5.2 | --- | 5.8 | 5.2 | --- | 15 | --- | 9.9 | --- | 6.5 | 5.5 | --- |
| TOTAL | 175.8 | 183.8 | 209.3 | 168.4 | 762.2 | 404.3 | 394 | 434.2 | 220.9 | 202.2 | 206.9 | 284.6 |
| MEAN | 5.67 | 6.13 | 6.75 | 5.43 | 27.2 | 13.0 | 13.1 | 14.0 | 7.36 | 6.52 | 6.67 | 9.49 |
| MAX | 9.9 | 12 | 12 | 5.5 | 104 | 24 | 23 | 59 | 10 | 9.4 | 14 | 30 |
| MIN | 5.0 | 5.0 | 5.5 | 5.2 | 5.2 | 9.9 | 11 | 8.1 | 6.2 | 5.5 | 5.5 | 5.5 |
| * | 0.61 | 0.47 | 0.47 | 0.39 | 0.77 | 0.66 | 0.69 | 0.90 | 1.1 | 1.6 | 1.5 | 0.92 |

WTR YR 1981 TOTAL 3646.6 MEAN 9.99 MAX 104 MIN 5.0

* Discharges, in cubic feet per second, by sewage treatment plant upstream of gage.

## 04276895 WEST BROOK AT LAKE GEORGE, NY--Continued

### WATER QUALITY RECORDS

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: July 1980 to March 1981 (discontinued).

INSTRUMENTATION.--Manning* pumping stage and time activated sampler installed Sept. 19, 1980.

COOPERATION.--Personnel of the New York State Department of Environmental Conservation provided samples both manual and from the pumping sampler.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 413 mg/L Feb. 11, 1981; minimum daily mean, 0 mg/L on Aug. 20, Nov. 26, Dec. 14, 15, 1980.
SEDIMENT DISCHARGE: Maximum daily, 98 tons (88.9 Mg) Feb. 11, 1981; minimum daily 0 ton (0 Mg) on Aug. 20, Nov. 26, Dec. 14, 15, 1980.

### SUSPENDED-SEDIMENT DISCHARGE, JULY TO SEPTEMBER 1980

| DAY | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | APRIL | | MAY | | JUNE | | JULY | | AUGUST | | SEPTEMBER | |
| 1 | | | | | | | 3 | .07 | 2 | .03 | 2 | .03 |
| 2 | | | | | | | 4 | .08 | 2 | .03 | 32 | .94 |
| 3 | | | | | | | 5 | .10 | 2 | .03 | 6 | .12 |
| 4 | | | | | | | 4 | .08 | 2 | .03 | 2 | .04 |
| 5 | | | | | | | 4 | .08 | 2 | .03 | 2 | .04 |
| 6 | | | | | | | 4 | .08 | 6 | .12 | 2 | .04 |
| 7 | | | | | | | 3 | .06 | 2 | .03 | 2 | .03 |
| 8 | | | | | | | 6 | .13 | 2 | .03 | 2 | .03 |
| 9 | | | | | | | 4 | .08 | 3 | .06 | 9 | .16 |
| 10 | | | | | | | 3 | .05 | 2 | .03 | 3 | .05 |
| 11 | | | | | | | 3 | .05 | 3 | .05 | 3 | .05 |
| 12 | | | | | | | 2 | .03 | 2 | .03 | 2 | .03 |
| 13 | | | | | | | 2 | .03 | 1 | .01 | 4 | .03 |
| 14 | | | | | | | 2 | .03 | 2 | .03 | 4 | .08 |
| 15 | | | | | | | 1 | .02 | 2 | .03 | 6 | .11 |
| 16 | | | | | | | 3 | .05 | 2 | .03 | 2 | .03 |
| 17 | | | | | | | 2 | .04 | 2 | .03 | 1 | .02 |
| 18 | | | | | | | 2 | .03 | 2 | .03 | 2 | .04 |
| 19 | | | | | | | 2 | .03 | 2 | .03 | 2 | .03 |
| 20 | | | | | | | 1 | .01 | 0 | .00 | 2 | .03 |
| 21 | | | | | | | 3 | .07 | 2 | .03 | 2 | .03 |
| 22 | | | | | | | 3 | .07 | 2 | .03 | 3 | .04 |
| 23 | | | | | | | 2 | .04 | 2 | .03 | 5 | .09 |
| 24 | | | | | | | 2 | .03 | 2 | .03 | 5 | .08 |
| 25 | | | | | | | 2 | .03 | 2 | .03 | 7 | .13 |
| 26 | | | | | | | 3 | .05 | 2 | .03 | 10 | .27 |
| 27 | | | | | | | 4 | .08 | 2 | .03 | 5 | .13 |
| 28 | | | | | | | 3 | .05 | 1 | .02 | 3 | .07 |
| 29 | | | | | | | 7 | .12 | 2 | .03 | 9 | .19 |
| 30 | | | | | | | 1 | .02 | 30 | .60 | 2 | .04 |
| 31 | | | | | | | 1 | .01 | 5 | .11 | --- | --- |
| TOTAL | | | | | | | --- | 1.70 | --- | 1.66 | --- | 3.00 |

* The use of the brand name in this report is for identification purposes only and does not imply endorsement by the U.S. Geological Survey.

## 04276895 WEST BROOK AT LAKE GEORGE, NY--Continued

### SUSPENDED-SEDIMENT DISCHARGE, OCTOBER 1980 TO MARCH 1981

| DAY | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OCTOBER | | NOVEMBER | | DECEMBER | | JANUARY | | FEBRUARY | | MARCH | |
| 1 | 3 | .04 | 1 | .01 | 2 | .04 | 1 | .01 | 2 | .03 | 4 | .26 |
| 2 | 2 | .03 | 1 | .01 | 4 | .08 | 1 | .01 | 201 | 57 | 3 | .18 |
| 3 | 2 | .03 | 1 | .01 | 10 | .32 | 1 | .01 | 26 | 1.1 | 3 | .16 |
| 4 | 2 | .04 | 1 | .01 | 2 | .04 | 1 | .01 | 3 | .09 | 8 | .39 |
| 5 | 2 | .03 | 2 | .03 | 2 | .04 | 3 | .04 | 2 | .05 | 5 | .24 |
| 6 | 2 | .03 | 2 | .03 | 2 | .04 | 3 | .04 | 2 | .05 | 4 | .18 |
| 7 | 2 | .03 | 2 | .03 | 2 | .04 | 3 | .04 | 2 | .05 | 4 | .16 |
| 8 | 1 | .01 | 1 | .01 | 1 | .02 | 4 | .06 | 2 | .05 | 3 | .12 |
| 9 | 2 | .03 | 2 | .03 | 1 | .02 | 3 | .04 | 2 | .05 | 2 | .08 |
| 10 | 2 | .03 | 1 | .02 | 1 | .02 | 3 | .04 | 3 | .07 | 2 | .07 |
| 11 | 2 | .03 | 1 | .02 | 1 | .02 | 2 | .03 | 413 | 98 | 2 | .07 |
| 12 | 2 | .03 | 1 | .01 | 1 | .02 | 2 | .03 | 51 | 8.4 | 2 | .06 |
| 13 | 2 | .03 | 1 | .01 | 1 | .02 | 7 | .10 | 2 | .09 | 2 | .06 |
| 14 | 2 | .03 | 1 | .01 | 0 | .00 | 2 | .03 | 1 | .04 | 2 | .06 |
| 15 | 1 | .01 | 1 | .01 | 0 | .00 | 2 | .03 | 1 | .04 | 2 | .06 |
| 16 | 2 | .03 | 1 | .01 | 1 | .02 | 1 | .01 | 1 | .04 | 3 | .09 |
| 17 | 5 | .07 | 1 | .01 | 2 | .03 | 1 | .01 | 1 | .04 | --- | --- |
| 18 | 2 | .03 | 1 | .01 | 1 | .02 | 1 | .01 | 2 | .10 | --- | --- |
| 19 | 2 | .03 | 2 | .03 | 1 | .02 | 1 | .01 | 4 | .28 | --- | --- |
| 20 | 1 | .01 | 2 | .03 | 1 | .02 | 1 | .01 | --- | --- | --- | --- |
| 21 | 2 | .03 | 2 | .03 | 1 | .02 | 1 | .01 | --- | --- | --- | --- |
| 22 | 4 | .06 | 2 | .03 | 2 | .03 | 1 | .01 | 5 | .50 | --- | --- |
| 23 | 2 | .03 | 2 | .03 | 2 | .03 | 1 | .01 | 5 | .39 | --- | --- |
| 24 | 2 | .03 | 6 | .12 | 3 | .05 | 1 | .01 | 56 | 8.0 | --- | --- |
| 25 | 14 | .25 | 3 | .08 | 2 | .03 | 1 | .01 | 20 | 3.1 | --- | --- |
| 26 | 9 | .24 | 0 | .00 | 2 | .03 | 2 | .03 | 10 | 1.1 | --- | --- |
| 27 | 7 | .15 | 1 | .02 | 2 | .03 | 7 | .10 | 4 | .33 | --- | --- |
| 28 | 8 | .14 | 2 | .05 | 2 | .03 | 2 | .03 | 4 | .29 | --- | --- |
| 29 | 8 | .13 | 3 | .10 | 1 | .02 | 2 | .03 | --- | --- | --- | --- |
| 30 | 5 | .07 | 3 | .07 | 1 | .02 | 2 | .03 | --- | --- | --- | --- |
| 31 | 1 | .01 | --- | --- | 2 | .03 | 2 | .03 | --- | --- | --- | --- |
| TOTAL | --- | 1.74 | --- | 0.87 | --- | 1.15 | --- | 0.87 | --- | 179.28 | --- | 2.24 |

## 04276920 ENGLISH BROOK AT LAKE GEORGE, NY

LOCATION.--Lat 43°25'54", long 73°42'26", Warren County, Hydrologic Unit 0201001, on left bank 400 ft (122 m) upstream from mouth and 0.1 mi (0.2 km) downstream from culvert on State Highway 9N. Water-quality sampling site at discharge station.

DRAINAGE AREA.--7.84 mi$^2$ (20.3 km$^2$).

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1980 to current year.

GAGE.--Water-stage recorder. Datum of gage is 330 ft (101 m), from topographic map.

REMARKS.--Records fair, except during periods affected by backwater from ice, which are poor.

COOPERATION.--Several discharge measurements during the ice affected period were provided by the New York State Department of Environmental Conservation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 155 ft$^3$/s (4.39 m$^3$/s) Feb. 20, 1981, gage height 2.48 ft (0.756 m), from rating curve extended above 50 ft$^3$/s (1.42 m$^3$/s); maximum gage height 4.88 ft (1.487 m) Feb. 11, 1981 (ice jam); minimum discharge 0.75 ft$^3$/s (0.021 m$^3$/s), Aug. 18, 19, 1980, gage height 0.36 ft (0.110 m).

EXTREMES FOR CURRENT PERIOD.--June to September 1980: Maximum discharge during period, 20 ft$^3$/s (0.566 m$^3$/s) Sept. 2, gage height 1.06 ft (0.323 m), no peak above base of 150 ft$^3$/s (4.25 m$^3$/s); minimum, 0.75 ft$^3$/s (0.021 m$^3$/s), Aug. 18, 19, gage height 0.36 ft (0.110 m).

WATER YEAR 1981: Peak discharges during period, above base of 150 ft$^3$/s (4.25 m$^3$/s) and maximum (*):

| Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|
| Feb. 11 | 2020 | Unknown | | *a4.88 | 1.487 |
| Feb. 20 | 1900 | *155 | 4.39 | 2.48 | 0.756 |

a Ice jam.

Minimum discharge, 1.2 ft$^3$/s (0.034 m$^3$/s) July 30; minimum gage height, 0.44 ft (0.134 m), Oct. 1, 2.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | --- | 6.1 | 2.0 | 2.7 |
| 2 | | | | | | | | | --- | 5.0 | 1.8 | 6.8 |
| 3 | | | | | | | | | --- | 4.8 | 1.8 | 7.0 |
| 4 | | | | | | | | | --- | 4.3 | 1.8 | 3.1 |
| 5 | | | | | | | | | --- | 4.1 | 1.8 | 2.5 |
| 6 | | | | | | | | | --- | 4.6 | 2.7 | 2.1 |
| 7 | | | | | | | | | --- | 3.8 | 1.6 | 2.0 |
| 8 | | | | | | | | | --- | 5.5 | 1.4 | 1.6 |
| 9 | | | | | | | | | --- | 5.9 | 3.4 | 1.4 |
| 10 | | | | | | | | | --- | 6.3 | 1.5 | 1.4 |
| 11 | | | | | | | | | --- | 3.6 | 1.2 | 1.2 |
| 12 | | | | | | | | | --- | 3.4 | 1.2 | 1.5 |
| 13 | | | | | | | | | 7.0 | 3.1 | 1.2 | 1.4 |
| 14 | | | | | | | | | 6.8 | 2.5 | 1.1 | 1.6 |
| 15 | | | | | | | | | 6.3 | 2.1 | 1.1 | 2.0 |
| 16 | | | | | | | | | 8.4 | 2.7 | .96 | 1.4 |
| 17 | | | | | | | | | 7.0 | 2.7 | .96 | 1.5 |
| 18 | | | | | | | | | 5.9 | 2.1 | .85 | 2.3 |
| 19 | | | | | | | | | 4.8 | 2.0 | .96 | 1.8 |
| 20 | | | | | | | | | 5.5 | 1.8 | 1.1 | 1.6 |
| 21 | | | | | | | | | 6.6 | 4.8 | 1.1 | 1.4 |
| 22 | | | | | | | | | 6.1 | 5.0 | .96 | 1.2 |
| 23 | | | | | | | | | 5.3 | 3.8 | .96 | 1.4 |
| 24 | | | | | | | | | 4.8 | 2.5 | .96 | .96 |
| 25 | | | | | | | | | 4.3 | 2.0 | .96 | 1.5 |
| 26 | | | | | | | | | 3.8 | 2.7 | .96 | 7.7 |
| 27 | | | | | | | | | 3.6 | 4.1 | .96 | 4.1 |
| 28 | | | | | | | | | 3.1 | 2.3 | 1.1 | 2.5 |
| 29 | | | | | | | | | 3.4 | 2.5 | 1.1 | 2.0 |
| 30 | | | | | | | | | 5.3 | 4.1 | 2.3 | 1.8 |
| 31 | | | | | | | | | --- | 2.3 | 4.3 | --- |
| TOTAL | | | | | | | | | --- | 112.5 | 46.09 | 71.46 |
| MEAN | | | | | | | | | --- | 3.63 | 1.49 | 2.38 |
| MAX | | | | | | | | | --- | 6.3 | 4.3 | 7.7 |
| MIN | | | | | | | | | --- | 1.8 | .85 | .96 |

## 04276920 ENGLISH BROOK AT LAKE GEORGE, NY--Continued

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.8 | 3.4 | 8.7 | 3.2 | 2.2 | 26 | 20 | 12 | 7.7 | 2.5 | 2.3 | 1.4 |
| 2 | 1.8 | 3.4 | 8.4 | 3.0 | 22 | 23 | 44 | 11 | 6.8 | 2.5 | 2.1 | 1.4 |
| 3 | 2.5 | 3.1 | 25 | 2.7 | 18 | 19 | 28 | 11 | 6.1 | 4.7 | 1.9 | 1.9 |
| 4 | 4.9 | 3.1 | 18 | 2.5 | 12 | 19 | 21 | 9.7 | 6.1 | 5.4 | 1.7 | 1.9 |
| 5 | 4.3 | 3.1 | 13 | 2.4 | 8.0 | 16 | 23 | 9.2 | 5.7 | 4.7 | 2.5 | 1.6 |
| 6 | 3.4 | 2.9 | 10 | 2.4 | 6.4 | 14 | 24 | 9.5 | 5.0 | 3.9 | 4.1 | 1.6 |
| 7 | 2.9 | 2.9 | 9.4 | 2.4 | 5.6 | 14 | 19 | 9.5 | 5.0 | 3.1 | 2.7 | 1.4 |
| 8 | 2.7 | 3.1 | 9.0 | 2.4 | 5.2 | 13 | 17 | 9.0 | 4.4 | 2.5 | 2.1 | 8.4 |
| 9 | 2.5 | 4.3 | 8.6 | 2.4 | 5.2 | 13 | 16 | 8.2 | 5.0 | 2.1 | 2.1 | 19 |
| 10 | 2.5 | 5.7 | 8.2 | 2.5 | 5.0 | 13 | 17 | 8.2 | 4.4 | 1.9 | 1.9 | 6.1 |
| 11 | 2.5 | 5.0 | 7.8 | 2.5 | 37 | 12 | 16 | 16 | 4.1 | 1.9 | 2.1 | 6.8 |
| 12 | 2.5 | 4.6 | 7.4 | 2.5 | 27 | 12 | 15 | 79 | 3.6 | 1.7 | 2.1 | 5.0 |
| 13 | 2.5 | 4.4 | 7.0 | 2.5 | 13 | 12 | 14 | 78 | 3.6 | 1.9 | 1.7 | 3.9 |
| 14 | 2.5 | 4.3 | 6.6 | 2.6 | 11 | 11 | 19 | 40 | 3.9 | 1.7 | 1.6 | 3.4 |
| 15 | 2.5 | 4.1 | 6.4 | 2.6 | 10 | 13 | 20 | 26 | 6.8 | 1.7 | 5.4 | 3.1 |
| 16 | 2.5 | 3.6 | 6.2 | 2.5 | 10 | 11 | 16 | 23 | 5.7 | 1.6 | 10 | 2.7 |
| 17 | 2.7 | 2.7 | 6.0 | 2.5 | 13 | 12 | 16 | 19 | 8.2 | 1.4 | 4.7 | 2.5 |
| 18 | 4.6 | 2.5 | 5.8 | 2.5 | 20 | 12 | 28 | 16 | 6.1 | 1.7 | 3.6 | 2.5 |
| 19 | 5.3 | 2.5 | 5.6 | 2.4 | 40 | 12 | 22 | 14 | 4.4 | 2.3 | 2.5 | 2.5 |
| 20 | 4.8 | 2.5 | 5.4 | 2.4 | 117 | 9.5 | 19 | 13 | 6.5 | 2.1 | 2.3 | 2.5 |
| 21 | 4.8 | 2.5 | 5.2 | 2.3 | 68 | 9.5 | 17 | 11 | 7.5 | 4.3 | 1.9 | 2.1 |
| 22 | 4.8 | 2.5 | 5.0 | 2.3 | 43 | 9.0 | 15 | 10 | 6.8 | 2.3 | 1.7 | 36 |
| 23 | 4.8 | 2.5 | 4.7 | 2.3 | 36 | 9.0 | 14 | 10 | 5.7 | 1.9 | 1.7 | 45 |
| 24 | 5.0 | 6.0 | 4.5 | 2.2 | 73 | 9.0 | 18 | 9.2 | 4.4 | 1.6 | 2.3 | 31 |
| 25 | 11 | 14 | 4.4 | 2.2 | 65 | 9.0 | 16 | 8.4 | 4.1 | 1.6 | 1.9 | 17 |
| 26 | 20 | 9.7 | 4.2 | 2.2 | 49 | 9.0 | 15 | 8.0 | 4.4 | 2.9 | 1.6 | 11 |
| 27 | 6.9 | 6.6 | 4.1 | 2.2 | 37 | 9.7 | 13 | 7.5 | 3.9 | 6.1 | 1.4 | 9.7 |
| 28 | 5.0 | 9.3 | 4.0 | 2.2 | 31 | 9.7 | 13 | 7.0 | 3.1 | 3.4 | 1.4 | 10 |
| 29 | 4.1 | 20 | 3.9 | 2.2 | --- | 10 | 13 | 6.4 | 2.9 | 9.2 | 1.4 | 8.4 |
| 30 | 3.5 | 12 | 3.8 | 2.2 | --- | 15 | 13 | 6.4 | 2.7 | 3.1 | 1.4 | 7.7 |
| 31 | 3.4 | --- | 3.5 | 2.2 | --- | 22 | --- | 8.7 | --- | 2.1 | 1.4 | --- |
| TOTAL | 135.0 | 156.3 | 229.8 | 75.4 | 789.6 | 407.4 | 561 | 513.9 | 154.6 | 89.8 | 77.5 | 257.5 |
| MEAN | 4.35 | 5.21 | 7.41 | 2.43 | 28.2 | 13.1 | 18.7 | 16.6 | 5.15 | 2.90 | 2.50 | 8.58 |
| MAX | 20 | 20 | 25 | 3.2 | 117 | 26 | 44 | 79 | 8.2 | 9.2 | 10 | 45 |
| MIN | 1.8 | 2.5 | 3.5 | 2.2 | 2.2 | 9.0 | 13 | 6.4 | 2.7 | 1.4 | 1.4 | 1.4 |

WTR YR 1981 TOTAL 3447.8 MEAN 9.45 MAX 117 MIN 1.4

## 04276920 ENGLISH BROOK AT LAKE GEORGE, NY--Continued

### WATER QUALITY RECORDS

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: July 1980 to March 1981 (discontinued).

INSTRUMENTATION.--Manning* pumping stage and time activated sampler installed Sept. 23, 1980.

COOPERATION.--Personnel of the New York State Department of Environmental Conservation provided samples both manual and from the pumping sampler.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 126 mg/L Feb. 11, 1981; minimum daily mean, 0 mg/L on many days.
SEDIMENT DISCHARGE: Maximum 31 tons (28 Mg) Feb. 11, 1981; minimum 0 ton (0 Mg) on many days.

### SUSPENDED-SEDIMENT DISCHARGE, JULY TO SEPTEMBER 1980

| DAY | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | APRIL | | MAY | | JUNE | | JULY | | AUGUST | | SEPTEMBER | |
| 1 | | | | | | | 3 | .05 | 2 | .01 | 5 | .04 |
| 2 | | | | | | | 7 | .09 | 2 | .00 | 14 | .53 |
| 3 | | | | | | | 2 | .03 | 2 | .00 | 10 | .19 |
| 4 | | | | | | | 2 | .02 | 2 | .00 | 4 | .03 |
| 5 | | | | | | | 2 | .02 | 3 | .01 | 4 | .03 |
| 6 | | | | | | | 3 | .04 | 11 | .08 | 4 | .02 |
| 7 | | | | | | | 5 | .05 | 2 | .00 | 3 | .02 |
| 8 | | | | | | | 16 | .24 | 2 | .00 | 3 | .01 |
| 9 | | | | | | | 2 | .03 | 3 | .03 | 3 | .01 |
| 10 | | | | | | | 2 | .03 | 2 | .00 | 3 | .01 |
| 11 | | | | | | | 2 | .02 | 2 | .00 | 2 | .00 |
| 12 | | | | | | | 3 | .03 | 2 | .00 | 3 | .01 |
| 13 | | | | | | | 6 | .05 | 1 | .00 | 3 | .01 |
| 14 | | | | | | | 1 | .00 | 1 | .00 | 5 | .02 |
| 15 | | | | | | | 1 | .00 | 1 | .00 | 9 | .05 |
| 16 | | | | | | | 2 | .01 | 1 | .00 | 3 | .01 |
| 17 | | | | | | | 2 | .01 | 1 | .00 | 3 | .01 |
| 18 | | | | | | | 2 | .01 | 1 | .00 | 3 | .02 |
| 19 | | | | | | | 1 | .00 | 1 | .00 | 3 | .01 |
| 20 | | | | | | | 1 | .00 | 1 | .00 | 3 | .01 |
| 21 | | | | | | | 8 | .10 | 1 | .00 | 2 | .00 |
| 22 | | | | | | | 1 | .01 | 1 | .00 | 9 | .03 |
| 23 | | | | | | | 4 | .04 | 1 | .00 | 10 | .04 |
| 24 | | | | | | | 2 | .01 | 1 | .00 | 5 | .01 |
| 25 | | | | | | | 2 | .01 | 1 | .00 | 8 | .03 |
| 26 | | | | | | | 4 | .03 | 1 | .00 | 17 | .35 |
| 27 | | | | | | | 3 | .03 | 1 | .00 | 8 | .09 |
| 28 | | | | | | | 2 | .01 | 1 | .00 | 6 | .04 |
| 29 | | | | | | | 4 | .03 | 1 | .00 | 4 | .02 |
| 30 | | | | | | | 2 | .02 | 10 | .06 | 4 | .02 |
| 31 | | | | | | | 2 | .01 | 5 | .06 | --- | --- |
| TOTAL | | | | | | | --- | 1.03 | --- | 0.25 | --- | 1.67 |

* The use of the brand name in this report is for identification purposes only and does not imply endorsement by the U.S. Geological Survey.

## 04276920 ENGLISH BROOK AT LAKE GEORGE, NY--Continued

### SUSPENDED-SEDIMENT DISCHARGE, OCTOBER 1980 TO MARCH 1981

| DAY | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN CONCEN-TRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OCTOBER | | NOVEMBER | | DECEMBER | | JANUARY | | FEBRUARY | | MARCH | |
| 1 | 6 | .03 | 0 | .00 | 3 | .07 | 1 | .00 | 0 | .00 | 1 | .07 |
| 2 | 6 | .03 | 1 | .00 | 1 | .02 | 1 | .00 | 17 | 1.0 | 0 | .00 |
| 3 | 7 | .05 | 1 | .00 | 6 | .41 | 1 | .00 | 0 | .00 | 1 | .05 |
| 4 | 10 | .13 | 1 | .00 | 4 | .19 | 2 | .01 | 1 | .03 | 2 | .10 |
| 5 | 8 | .09 | 1 | .00 | 4 | .14 | 2 | .01 | 1 | .02 | 1 | .04 |
| 6 | 5 | .05 | 0 | .00 | 3 | .08 | 2 | .01 | 0 | .00 | 1 | .04 |
| 7 | 3 | .02 | 0 | .00 | 2 | .05 | 1 | .00 | 0 | .00 | 1 | .04 |
| 8 | 3 | .02 | 1 | .00 | 2 | .05 | 0 | .00 | 0 | .00 | 1 | .04 |
| 9 | 4 | .03 | 1 | .01 | 2 | .05 | 0 | .00 | 0 | .00 | 1 | .04 |
| 10 | 4 | .03 | 1 | .02 | 2 | .04 | 0 | .00 | 1 | .01 | 3 | .11 |
| 11 | 3 | .02 | 1 | .01 | 2 | .04 | 0 | .00 | 126 | 31 | 1 | .03 |
| 12 | 3 | .02 | 1 | .01 | 2 | .04 | 1 | .00 | 16 | 1.2 | 1 | .03 |
| 13 | 2 | .01 | 1 | .01 | 2 | .04 | 1 | .00 | 5 | .18 | 1 | .03 |
| 14 | 2 | .01 | 0 | .00 | 4 | .07 | 2 | .01 | 2 | .06 | 1 | .03 |
| 15 | 2 | .01 | 0 | .00 | 4 | .07 | 2 | .01 | 2 | .05 | 1 | .04 |
| 16 | 2 | .01 | 0 | .00 | 3 | .05 | 1 | .00 | 20 | .54 | 1 | .03 |
| 17 | 2 | .01 | 0 | .00 | 4 | .06 | 1 | .00 | 26 | .91 | --- | --- |
| 18 | 2 | .02 | 0 | .00 | 2 | .03 | 1 | .00 | 15 | .81 | --- | --- |
| 19 | 2 | .03 | 0 | .00 | 2 | .03 | 1 | .00 | 18 | 1.9 | --- | --- |
| 20 | 2 | .03 | 0 | .00 | 2 | .03 | 1 | .00 | 35 | 11 | --- | --- |
| 21 | 2 | .03 | 0 | .00 | 2 | .03 | 1 | .00 | 18 | 3.3 | --- | --- |
| 22 | 3 | .04 | 0 | .00 | 1 | .01 | 1 | .00 | 5 | .58 | --- | --- |
| 23 | 3 | .04 | 0 | .00 | 1 | .01 | 0 | .00 | 5 | .49 | --- | --- |
| 24 | 2 | .03 | 4 | .06 | 1 | .01 | 0 | .00 | 22 | 4.3 | --- | --- |
| 25 | 8 | .24 | 4 | .15 | 1 | .01 | 0 | .00 | 9 | 1.6 | --- | --- |
| 26 | 35 | 1.9 | 2 | .05 | 1 | .01 | 0 | .00 | 5 | .66 | --- | --- |
| 27 | 8 | .15 | 2 | .04 | 1 | .01 | 1 | .00 | 2 | .20 | --- | --- |
| 28 | 4 | .05 | 3 | .08 | 1 | .01 | 1 | .00 | 2 | .17 | --- | --- |
| 29 | 1 | .01 | 5 | .27 | 1 | .01 | 0 | .00 | --- | --- | --- | --- |
| 30 | 1 | .00 | 3 | .10 | 1 | .01 | 0 | .00 | --- | --- | --- | --- |
| 31 | 0 | .00 | --- | --- | 1 | .00 | 0 | .00 | --- | --- | --- | --- |
| TOTAL | --- | 3.14 | --- | 0.81 | --- | 1.68 | --- | 0.05 | --- | 60.01 | --- | 0.72 |

## 04278000 LAKE GEORGE AT ROGERS ROCK, NY

LOCATION.—Lat 43°48'28", long 73°27'30", Essex County, Hydrologic Unit 02010001, on west shore about 500 ft (152 m) north of Hooper's dock at Rogers Rock, and 0.4 mi (0.6 km) west of Baldwin.

DRAINAGE AREA.—233 mi² (603 km²) at outlet at Ticonderoga.

PERIOD OF RECORD.—July 1913 to current year.

GAGE.—Water-stage recorder. Datum of gage is 315.93 ft (96.295 m) National Geodetic Vertical Datum, adjustment of 1912. Prior to Nov. 4, 1929, nonrecording gages at several sites within a half mile of present site at same datum. Nov. 4, 1929 to Sept. 26, 1936, nonrecording gage at present site and datum.

REMARKS.—Elevation of lake regulated by floodgates at Ticonderoga. Prior to October 1974, lake was regulated by powerplant wheel gate and floodgates. Lake George has been controlled by a dam at its outlet for more than 100 years. Area of water surface is 44 mi² (114 km²).

EXTREMES FOR PERIOD OF RECORD.—Maximum gage height observed, 5.09 ft (1.551 m) Apr. 9, 1936; minimum, 0.64 ft (0.195 m) Dec. 20, 1941.

EXTREMES FOR CURRENT YEAR.—Maximum gage height, 4.37 ft (1.332 m) Feb. 26, 27, 28, Mar. 1, 2; minimum, 2.94 ft (0.896 m) Oct. 25.

### GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.26 | 3.13 | 3.21 | 3.29 | 3.12 | 4.33 | 3.66 | 3.54 | 3.68 | 3.77 | 3.66 | 3.63 |
| 2 | 3.29 | 3.12 | 3.20 | 3.29 | 3.24 | 4.32 | 3.76 | 3.54 | 3.68 | 3.76 | 3.66 | 3.63 |
| 3 | 3.25 | 3.12 | 3.28 | 3.29 | 3.33 | 4.28 | 3.80 | 3.55 | 3.70 | 3.79 | 3.65 | 3.64 |
| 4 | 3.29 | 3.13 | 3.29 | 3.29 | 3.36 | 4.23 | 3.82 | 3.56 | 3.70 | 3.81 | 3.65 | 3.62 |
| 5 | 3.29 | 3.11 | 3.24 | 3.29 | 3.38 | 4.16 | 3.85 | 3.58 | 3.69 | 3.77 | 3.66 | 3.62 |
| 6 | 3.27 | 3.12 | 3.25 | 3.27 | 3.38 | 4.11 | 3.85 | 3.57 | 3.72 | 3.76 | 3.63 | 3.61 |
| 7 | 3.27 | 3.10 | 3.26 | 3.27 | 3.38 | 4.07 | 3.86 | 3.58 | 3.70 | 3.73 | 3.61 | 3.62 |
| 8 | 3.29 | 3.09 | 3.32 | 3.28 | 3.37 | 4.02 | 3.86 | 3.62 | 3.70 | 3.74 | 3.63 | 3.66 |
| 9 | 3.22 | 3.13 | 3.27 | 3.26 | --- | 3.97 | 3.88 | 3.64 | 3.73 | 3.68 | 3.65 | 3.79 |
| 10 | 3.22 | 3.12 | 3.31 | 3.26 | --- | 3.91 | 3.86 | 3.63 | 3.71 | 3.62 | 3.64 | 3.80 |
| 11 | 3.24 | 3.09 | 3.29 | 3.27 | --- | 3.85 | 3.83 | 3.65 | 3.71 | 3.62 | 3.65 | 3.77 |
| 12 | 3.21 | 3.07 | 3.31 | 3.26 | 3.64 | 3.83 | 3.73 | 3.78 | 3.71 | 3.61 | 3.66 | 3.79 |
| 13 | 3.20 | 3.06 | 3.31 | 3.23 | 3.68 | 3.76 | 3.75 | 3.88 | 3.69 | 3.59 | 3.66 | 3.81 |
| 14 | 3.16 | 3.06 | 3.33 | 3.23 | 3.69 | 3.74 | 3.78 | 3.91 | 3.71 | 3.59 | 3.62 | 3.79 |
| 15 | 3.14 | 3.05 | 3.29 | --- | 3.68 | 3.66 | 3.69 | 3.89 | 3.76 | 3.55 | 3.67 | 3.75 |
| 16 | 3.13 | 3.02 | 3.25 | --- | 3.69 | 3.59 | 3.68 | 3.89 | 3.76 | 3.54 | 3.76 | 3.70 |
| 17 | 3.14 | 3.02 | 3.29 | --- | 3.70 | 3.56 | 3.62 | 3.81 | 3.81 | 3.53 | 3.74 | 3.70 |
| 18 | 3.18 | 3.02 | 3.34 | --- | 3.72 | 3.56 | 3.62 | 3.77 | 3.80 | 3.53 | 3.70 | 3.73 |
| 19 | 3.17 | 3.06 | 3.31 | --- | 3.75 | 3.52 | 3.57 | 3.72 | 3.82 | 3.54 | 3.69 | 3.71 |
| 20 | 3.15 | 3.06 | 3.30 | --- | 3.82 | 3.52 | 3.56 | 3.65 | 3.79 | 3.57 | 3.68 | 3.74 |
| 21 | 3.14 | 3.07 | 3.31 | --- | 3.97 | 3.51 | 3.50 | 3.62 | 3.81 | 3.59 | 3.68 | 3.70 |
| 22 | 3.11 | 3.04 | 3.29 | --- | 4.03 | 3.49 | 3.49 | 3.57 | 3.87 | 3.57 | 3.68 | 3.76 |
| 23 | 3.08 | 3.07 | 3.31 | --- | 4.06 | 3.49 | 3.50 | 3.56 | 3.82 | 3.56 | 3.68 | 3.88 |
| 24 | 3.07 | 3.06 | 3.30 | --- | 4.13 | 3.49 | 3.54 | 3.60 | 3.81 | 3.55 | 3.68 | 3.94 |
| 25 | 3.03 | 3.09 | 3.30 | --- | 4.27 | 3.50 | 3.55 | 3.62 | 3.81 | 3.57 | 3.65 | 3.97 |
| 26 | 3.29 | 3.11 | 3.31 | --- | 4.35 | 3.52 | 3.58 | 3.63 | 3.82 | 3.57 | 3.60 | 3.93 |
| 27 | 3.20 | 3.09 | 3.29 | --- | 4.36 | 3.53 | 3.56 | 3.62 | 3.80 | 3.59 | 3.67 | 3.91 |
| 28 | 3.18 | 3.11 | 3.30 | --- | 4.35 | 3.55 | 3.56 | 3.64 | 3.80 | 3.60 | 3.65 | 3.87 |
| 29 | 3.16 | 3.22 | 3.29 | --- | --- | 3.57 | 3.58 | 3.63 | 3.80 | 3.63 | 3.67 | 3.80 |
| 30 | 3.15 | 3.21 | 3.26 | 3.33 | --- | 3.59 | 3.57 | 3.66 | 3.79 | 3.65 | 3.66 | 3.73 |
| 31 | 3.17 | --- | 3.29 | 3.12 | --- | 3.62 | --- | 3.66 | --- | 3.66 | 3.65 | --- |
| MEAN | 3.19 | 3.09 | 3.29 | --- | --- | 3.77 | 3.68 | 3.66 | 3.76 | 3.63 | 3.67 | 3.75 |
| MAX | 3.29 | 3.22 | 3.34 | --- | --- | 4.33 | 3.88 | 3.91 | 3.87 | 3.81 | 3.76 | 3.97 |
| MIN | 3.03 | 3.02 | 3.20 | --- | --- | 3.49 | 3.49 | 3.54 | 3.68 | 3.53 | 3.61 | 3.61 |

## 04278300 NORTHWEST BAY BROOK NEAR BOLTON LANDING, NY

LOCATION.--Lat 43°39'48", long 73°36'14", Warren County, Hydrologic Unit 02010001, on left bank 10 ft (3 m) downstream from county bridge on Padanarum Road, 7.7 mi (12.4 km) north of Bolton Landing.

DRAINAGE AREA.--23.4 mi$^2$ (61.6 km$^2$).

PERIOD OF RECORD.--October 1965 to September 1968, October 1971 to current year. Annual maximum, water years 1969-71.

GAGE.--Water-stage recorder. Datum of gage is 423.60 ft (129.113 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1973, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--13 years (1966-68, 1972-81), 37.0 ft$^3$/s (1.048 m$^3$/s), 21.47 in/yr (545 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,770 ft$^3$/s (50.1 m$^3$/s) Feb. 11, 1981, gage height, 6.35 ft (1.935 m) from rating curve extended above 190 ft$^3$/s (5.38 m$^3$/s) on basis of slope-area measurement at gage height 5.53 ft (1.686 m); maximum gage height, 7.14 ft (2.716 m) Feb. 11, 1981 (ice jam); minimum discharge recorded, 0.28 ft$^3$/s (0.008 m$^3$/s) Sept. 27, 28, 29, 1968, gage height, 1.18 ft (0.360 m).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 400 ft$^3$/s (11 m$^3$/s):

| Date | Time | Discharge (ft$^3$/s) | (m$^3$/s) | Gage height (ft) | (m) |
|---|---|---|---|---|---|
| Feb. 11 | 2300 | 1,770 | 50.1 | a7.14 | 2.176 |

a Ice jam.

Minimum discharge, 0.82 ft$^3$/s (0.023 m$^3$/s) Oct. 1, 2; minimum gage height, 0.74 ft (0.226 m) July 17.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .91 | 4.3 | 23 | 8.4 | 4.1 | 60 | 40 | 21 | 10 | 4.1 | 8.7 | 8.0 |
| 2 | 1.1 | 4.3 | 21 | 8.0 | 200 | 56 | 109 | 19 | 8.7 | 3.5 | 6.3 | 7.7 |
| 3 | 1.4 | 4.1 | 58 | 7.8 | 150 | 50 | 66 | 18 | 8.0 | 4.5 | 6.3 | 8.7 |
| 4 | 2.6 | 3.7 | 50 | 7.0 | 60 | 45 | 54 | 18 | 7.7 | 5.5 | 21 | 8.0 |
| 5 | 2.3 | 3.9 | 40 | 6.4 | 35 | 42 | 53 | 17 | 7.4 | 5.0 | 18 | 6.9 |
| 6 | 1.6 | 3.5 | 32 | 6.0 | 25 | 38 | 51 | 18 | 7.1 | 4.5 | 19 | 6.0 |
| 7 | 1.3 | 3.9 | 25 | 5.8 | 22 | 35 | 43 | 18 | 7.4 | 3.7 | 12 | 5.8 |
| 8 | 1.6 | 4.8 | 23 | 5.8 | 20 | 32 | 37 | 16 | 6.0 | 3.1 | 9.3 | 8.7 |
| 9 | 1.7 | 5.8 | 20 | 5.8 | 20 | 30 | 35 | 15 | 7.1 | 2.6 | 8.4 | 53 |
| 10 | 1.3 | 6.9 | 17 | 5.6 | 20 | 27 | 35 | 14 | 6.9 | 2.4 | 6.9 | 26 |
| 11 | 1.6 | 6.6 | 16 | 5.4 | 460 | 26 | 32 | 21 | 5.5 | 2.0 | 6.3 | 40 |
| 12 | 1.6 | 5.8 | 15 | 5.4 | 1170 | 24 | 30 | 87 | 5.0 | 1.8 | 7.7 | 29 |
| 13 | 1.3 | 5.3 | 14 | 5.2 | 700 | 22 | 26 | 107 | 4.8 | 2.1 | 6.3 | 23 |
| 14 | 2.1 | 5.0 | 13 | 4.9 | 130 | 21 | 28 | 68 | 4.5 | 2.0 | 5.5 | 18 |
| 15 | 2.3 | 4.8 | 12 | 4.7 | 60 | 20 | 29 | 51 | 6.3 | 1.7 | 8.7 | 16 |
| 16 | 2.1 | 4.3 | 12 | 4.5 | 50 | 19 | 26 | 55 | 5.8 | 1.4 | 50 | 13 |
| 17 | 2.3 | 4.3 | 11 | 4.5 | 43 | 18 | 25 | 50 | 24 | 1.1 | 26 | 11 |
| 18 | 2.6 | 4.1 | 11 | 4.4 | 37 | 17 | 41 | 40 | 15 | 1.2 | 18 | 11 |
| 19 | 2.9 | 4.5 | 11 | 4.3 | 35 | 16 | 39 | 33 | 10 | 1.4 | 14 | 11 |
| 20 | 2.8 | 4.8 | 11 | 4.2 | 350 | 15 | 34 | 28 | 7.7 | 2.0 | 11 | 10 |
| 21 | 2.9 | 4.3 | 10 | 4.0 | 250 | 15 | 29 | 24 | 9.3 | 5.3 | 9.3 | 9.0 |
| 22 | 3.3 | 4.8 | 9.8 | 3.9 | 120 | 15 | 26 | 21 | 8.0 | 6.9 | 8.0 | 79 |
| 23 | 3.1 | 4.5 | 9.6 | 3.9 | 100 | 17 | 25 | 18 | 6.9 | 3.5 | 8.0 | 192 |
| 24 | 3.3 | 5.5 | 9.6 | 3.9 | 200 | 16 | 40 | 16 | 5.5 | 2.6 | 30 | 194 |
| 25 | 4.8 | 18 | 9.6 | 3.9 | 170 | 18 | 35 | 14 | 7.7 | 2.1 | 29 | 102 |
| 26 | 21 | 17 | 9.4 | 3.9 | 120 | 18 | 31 | 13 | 14 | 2.4 | 17 | 64 |
| 27 | 10 | 13 | 9.2 | 4.1 | 84 | 20 | 27 | 12 | 10 | 33 | 13 | 53 |
| 28 | 6.9 | 16 | 9.0 | 4.1 | 70 | 21 | 25 | 11 | 7.7 | 11 | 11 | 68 |
| 29 | 5.8 | 53 | 8.9 | 3.9 | --- | 22 | 24 | 11 | 6.3 | 27 | 9.3 | 50 |
| 30 | 4.8 | 33 | 8.6 | 3.9 | --- | 30 | 23 | 11 | 5.0 | 24 | 8.7 | 38 |
| 31 | 4.5 | --- | 8.4 | 3.9 | --- | 42 | --- | 12 | --- | 13 | 8.0 | --- |
| TOTAL | 107.81 | 263.8 | 537.1 | 157.5 | 4705.1 | 847 | 1118 | 877 | 245.3 | 186.4 | 420.7 | 1169.8 |
| MEAN | 3.48 | 8.79 | 17.3 | 5.08 | 168 | 27.3 | 37.3 | 28.3 | 8.18 | 6.01 | 13.6 | 39.0 |
| MAX | 21 | 53 | 58 | 8.4 | 1170 | 60 | 109 | 107 | 24 | 33 | 50 | 194 |
| MIN | .91 | 3.5 | 8.4 | 3.9 | 4.1 | 15 | 23 | 11 | 4.5 | 1.1 | 5.5 | 5.8 |
| CFSM | .15 | .38 | .74 | .22 | 7.18 | 1.17 | 1.59 | 1.21 | .35 | .26 | .58 | 1.67 |
| IN. | .17 | .42 | .85 | .25 | 7.48 | 1.35 | 1.78 | 1.39 | .39 | .30 | .67 | 1.86 |

CAL YR 1980 TOTAL 7608.16 MEAN 20.8 MAX 370 MIN .51 CFSM .89 IN 12.09
WTR YR 1981 TOTAL 10635.51 MEAN 29.1 MAX 1170 MIN .91 CFSM 1.24 IN 16.91

## 04280000 POULTNEY RIVER BELOW FAIR HAVEN, VT

LOCATION.--Lat 43°37'40", long 73°18'50", Rutland County, Hydrologic Unit 02010001, on right bank 0.3 mi (0.5 km) downstream from Carver Falls, 1.9 mi (3.1 km) upstream from Hubbardton River, and 3.2 mi (5.1 km) northwest of Fair Haven.

DRAINAGE AREA.--187 mi$^2$ (484 km$^2$).

PERIOD OF RECORD.--Discharge: October 1928 to current year.
Water-quality records: Water year 1954.

REVISED RECORDS.--WSP 1114: 1929(M), 1932-35.

GAGE.--Water-stage recorder. Altitude of gage is 105 ft (32 m), from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Flow regulated by powerplant upstream and by Lake Bomoseen. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--53 years, 249 ft$^3$/s (7.052 m$^3$/s), 18.08 in/yr (459 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,800 ft$^3$/s (419 m$^3$/s) July 20, 1945, gage height, 24.36 ft (7.425 m), from high-water mark in well, from rating curve extended above 2,600 ft$^3$/s (74 m$^3$/s) on basis of computations of flow over dam at gage heights 16.10 ft (4.907 m), 21.40 ft (6.523 m), and 24.36 ft (7.425 m); minimum daily, 2.1 ft$^3$/s (0.059 m$^3$/s) Aug. 8, 1965, Sept. 13, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,600 ft$^3$/s (74 m$^3$/s) and maximum (*):

| Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) | Date | Time | Discharge (ft$^3$/s) | Discharge (m$^3$/s) | Gage height (ft) | Gage height (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sept. 24 | 1630 | *2980 | 84.4 | 12.18 | 3.712 | | | | | | |

Minimum daily discharge, 20 ft$^3$/s (0.57 m$^3$/s) Sept. 5.

### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 42 | 127 | 410 | 115 | 160 | 1020 | 433 | 378 | 164 | 116 | 43 | 36 |
| 2 | 81 | 140 | 374 | 98 | 460 | 935 | 749 | 298 | 128 | 67 | 64 | 36 |
| 3 | 52 | 141 | 463 | 88 | 980 | 857 | 596 | 201 | 104 | 58 | 50 | 37 |
| 4 | 74 | 149 | 401 | 72 | 620 | 757 | 462 | 176 | 101 | 81 | 48 | 29 |
| 5 | 101 | 145 | 322 | 60 | 370 | 556 | 447 | 170 | 93 | 85 | 42 | 20 |
| 6 | 86 | 136 | 308 | 62 | 270 | 467 | 729 | 166 | 95 | 91 | 200 | 35 |
| 7 | 56 | 134 | 278 | 64 | 220 | 432 | 531 | 157 | 94 | 76 | 162 | 34 |
| 8 | 82 | 149 | 268 | 66 | 200 | 420 | 449 | 135 | 93 | 76 | 92 | 32 |
| 9 | 68 | 144 | 244 | 66 | 195 | 408 | 380 | 137 | 81 | 64 | 52 | 110 |
| 10 | 66 | 155 | 246 | 62 | 200 | 371 | 440 | 110 | 103 | 61 | 51 | 120 |
| 11 | 58 | 172 | 202 | 58 | 330 | 301 | 478 | 127 | 89 | 52 | 42 | 94 |
| 12 | 58 | 143 | 155 | 55 | 1100 | 287 | 464 | 306 | 78 | 53 | 78 | 96 |
| 13 | 61 | 150 | 170 | 55 | 740 | 264 | 363 | 864 | 76 | 51 | 63 | 105 |
| 14 | 57 | 111 | 150 | 55 | 460 | 255 | 258 | 639 | 76 | 48 | 57 | 89 |
| 15 | 53 | 115 | 140 | 54 | 350 | 221 | 293 | 521 | 75 | 51 | 54 | 80 |
| 16 | 54 | 91 | 135 | 55 | 320 | 239 | 242 | 624 | 80 | 49 | 264 | 86 |
| 17 | 50 | 96 | 150 | 58 | 360 | 206 | 227 | 636 | 838 | 50 | 298 | 80 |
| 18 | 37 | 58 | 140 | 58 | 440 | 199 | 330 | 478 | 815 | 36 | 291 | 58 |
| 19 | 84 | 66 | 145 | 60 | 580 | 179 | 346 | 330 | 777 | 34 | 226 | 49 |
| 20 | 64 | 54 | 150 | 58 | 1300 | 187 | 352 | 276 | 675 | 54 | 136 | 53 |
| 21 | 51 | 50 | 160 | 56 | 1650 | 178 | 426 | 227 | 581 | 41 | 74 | 77 |
| 22 | 59 | 50 | 165 | 58 | 1250 | 167 | 349 | 213 | 271 | 71 | 74 | 335 |
| 23 | 61 | 54 | 150 | 60 | 1100 | 174 | 260 | 186 | 178 | 70 | 74 | 2150 |
| 24 | 55 | 69 | 165 | 59 | 1150 | 176 | 290 | 178 | 128 | 142 | 116 | 2690 |
| 25 | 60 | 418 | 170 | 60 | 1600 | 184 | 429 | 137 | 117 | 44 | 89 | 1930 |
| 26 | 68 | 397 | 180 | 60 | 1750 | 185 | 429 | 149 | 130 | 26 | 77 | 1300 |
| 27 | 124 | 279 | 190 | 58 | 1410 | 233 | 358 | 127 | 135 | 57 | 58 | 1040 |
| 28 | 130 | 263 | 170 | 54 | 1170 | 289 | 316 | 111 | 128 | 68 | 51 | 1140 |
| 29 | 123 | 647 | 150 | 52 | --- | 285 | 341 | 113 | 139 | 196 | 41 | 1030 |
| 30 | 123 | 496 | 155 | 49 | --- | 491 | 411 | 110 | 199 | 175 | 52 | 688 |
| 31 | 117 | --- | 130 | 48 | --- | 545 | --- | 124 | --- | 87 | 58 | --- |
| TOTAL | 2255 | 5199 | 6636 | 1933 | 20735 | 11468 | 12178 | 8404 | 6641 | 2230 | 3077 | 13659 |
| MEAN | 72.7 | 173 | 214 | 62.4 | 741 | 370 | 406 | 271 | 221 | 71.9 | 99.3 | 455 |
| MAX | 130 | 647 | 463 | 115 | 1750 | 1020 | 749 | 864 | 838 | 196 | 298 | 2690 |
| MIN | 37 | 50 | 130 | 48 | 160 | 167 | 227 | 110 | 75 | 26 | 41 | 20 |
| CFSM | .39 | .93 | 1.14 | .33 | 3.96 | 1.98 | 2.17 | 1.45 | 1.18 | .38 | .53 | 2.43 |
| IN. | .45 | 1.03 | 1.32 | .38 | 4.12 | 2.28 | 2.42 | 1.67 | 1.32 | .44 | .61 | 2.72 |

CAL YR 1980 TOTAL 65435.3 MEAN 179 MAX 2500 MIN 6.0 CFSM .96 IN 13.02
WTR YR 1981 TOTAL 94415.0 MEAN 259 MAX 2690 MIN 20 CFSM 1.39 IN 18.78

## 04294500 LAKE CHAMPLAIN AT BURLINGTON, VT

LOCATION.--Lat 44°28'52", long 73°13'27", Chittenden County, Hydrologic Unit 02010003, 50 ft (15 m) south of Gulf Oil Co. dock at Burlington, 0.1 mi (0.2 km) north of Burlington Water Department pumping station, and 0.5 mi (0.8 km) north of railroad station.

PERIOD OF RECORD.--Gage heights: May 1907 to current year.
Water-quality records: Water year 1971.

REVISED RECORDS.--WSP 684: 1912-29 (datum correction). WSP 1207: 1938 (datum correction).

GAGE.--Water-stage recorder. Datum of gage is 92.86 ft (28.304 m) National Geodetic Vertical Datum of 1929. Prior to July 20, 1937, nonrecording gage at site 0.7 mi (1.1 km) south, and July 20, 1937, to Sept. 7, 1939, nonrecording gage at site 0.1 mi (0.2 km) south, both at present datum.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 8.80 ft (2.682 m) Apr. 4, 1976; minimum observed, -0.25 ft (-0.076 m) Dec. 4, 1908.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 6.17 ft (1.881 m) Mar. 1, affected by seiche; minimum, 1.65 ft (0.503 m) Nov. 4, affected by seiche.

### MEAN GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.93 | 1.90 | 2.48 | 2.56 | 1.95 | 6.15 | 4.50 | 4.40 | 3.65 | 3.04 | 2.36 | 3.18 |
| 2 | 1.91 | 1.90 | 2.53 | 2.56 | 2.03 | 6.14 | 4.69 | 4.36 | 3.61 | 3.00 | 2.34 | 3.15 |
| 3 | 1.97 | 1.84 | 2.59 | 2.53 | 2.20 | 6.13 | 4.83 | 4.31 | 3.54 | 2.96 | 2.33 | 3.05 |
| 4 | 2.03 | 1.72 | 2.63 | 2.52 | 2.33 | 6.08 | 4.87 | 4.25 | 3.52 | 2.92 | 2.35 | 3.00 |
| 5 | 2.07 | 1.80 | 2.66 | 2.50 | 2.40 | 6.02 | 4.91 | 4.18 | 3.54 | 2.90 | 2.40 | 2.92 |
| 6 | 2.10 | 1.79 | 2.67 | 2.49 | 2.43 | 5.95 | 4.95 | 4.13 | 3.53 | 2.89 | 2.43 | 2.86 |
| 7 | 2.11 | 1.78 | 2.66 | 2.48 | 2.46 | 5.92 | 4.97 | 4.08 | 3.55 | 2.89 | 2.47 | 2.85 |
| 8 | 2.06 | 1.86 | 2.65 | 2.46 | 2.48 | 5.84 | 4.92 | 4.01 | 3.57 | 2.84 | 2.48 | 2.90 |
| 9 | 2.06 | 1.86 | 2.73 | 2.44 | 2.50 | 5.76 | 4.89 | 3.91 | 3.58 | 2.83 | 2.48 | 2.98 |
| 10 | 2.05 | 1.95 | 2.84 | 2.42 | 2.50 | 5.69 | 4.90 | 3.85 | 3.60 | 2.81 | 2.52 | 2.99 |
| 11 | 2.03 | 2.01 | 2.90 | 2.41 | 2.52 | 5.62 | 4.88 | 3.81 | 3.61 | 2.78 | 2.54 | 3.00 |
| 12 | 2.03 | 2.03 | 2.90 | 2.39 | 2.75 | 5.54 | 4.90 | 3.82 | 3.60 | 2.75 | 2.59 | 3.01 |
| 13 | 2.01 | 2.03 | 2.90 | 2.38 | 3.00 | 5.45 | 4.86 | 3.92 | 3.59 | 2.71 | 2.60 | 3.00 |
| 14 | 1.98 | 2.05 | 2.89 | 2.36 | 3.13 | 5.39 | 4.67 | 4.05 | 3.54 | 2.69 | 2.60 | 3.00 |
| 15 | 1.98 | 2.06 | 2.87 | 2.35 | 3.21 | 5.31 | 4.69 | 4.11 | 3.48 | 2.70 | 2.63 | 3.01 |
| 16 | 1.97 | 2.06 | 2.88 | 2.33 | 3.23 | 5.24 | 4.67 | 4.15 | 3.44 | 2.68 | 2.70 | 3.00 |
| 17 | 1.94 | 2.05 | 2.86 | 2.32 | 3.28 | 5.15 | 4.63 | 4.20 | 3.43 | 2.63 | 2.80 | 2.99 |
| 18 | 1.89 | 2.08 | 2.80 | 2.29 | 3.37 | 5.05 | 4.63 | 4.21 | 3.41 | 2.60 | 3.10 | 2.97 |
| 19 | 1.90 | 2.06 | 2.83 | 2.27 | 3.49 | 4.96 | 4.64 | 4.20 | 3.37 | 2.59 | 3.30 | 2.93 |
| 20 | 1.89 | 2.04 | 2.81 | 2.25 | 3.70 | 4.88 | 4.64 | 4.18 | 3.36 | 2.56 | 3.35 | 2.88 |
| 21 | 1.88 | 2.00 | 2.80 | 2.23 | 4.04 | 4.82 | 4.61 | 4.13 | 3.31 | 2.52 | 3.35 | 2.85 |
| 22 | 1.86 | 2.01 | 2.77 | 2.20 | 4.43 | 4.73 | 4.56 | 4.10 | 3.30 | 2.50 | 3.36 | 2.88 |
| 23 | 1.84 | 1.96 | 2.75 | 2.19 | 4.72 | 4.65 | 4.51 | 4.06 | 3.25 | 2.51 | 3.38 | 3.05 |
| 24 | 1.83 | 1.98 | 2.73 | 2.17 | 4.98 | 4.57 | 4.49 | 3.99 | 3.20 | 2.47 | 3.30 | 3.35 |
| 25 | 1.81 | 2.09 | 2.73 | 2.14 | 5.43 | 4.51 | 4.52 | 3.92 | 3.14 | 2.40 | 3.22 | 3.62 |
| 26 | 1.87 | 2.16 | 2.66 | 2.10 | 5.86 | 4.42 | 4.51 | 3.89 | 3.15 | 2.33 | 3.24 | 3.74 |
| 27 | 1.87 | 2.23 | 2.67 | 2.09 | 6.06 | 4.39 | 4.51 | 3.85 | 3.16 | 2.35 | 3.25 | 3.77 |
| 28 | 1.91 | 2.27 | 2.62 | 2.08 | 6.11 | 4.35 | 4.49 | 3.81 | 3.14 | 2.38 | 3.20 | 3.88 |
| 29 | 1.94 | 2.34 | 2.62 | 2.06 | --- | 4.28 | 4.44 | 3.76 | 3.10 | 2.43 | 3.23 | 3.94 |
| 30 | 1.94 | 2.43 | 2.61 | 2.03 | --- | 4.31 | 4.43 | 3.71 | 3.04 | 2.41 | 3.23 | 3.95 |
| 31 | 1.88 | --- | 2.58 | 2.00 | --- | 4.42 | --- | 3.69 | --- | 2.38 | 3.19 | --- |
| MEAN | 1.95 | 2.01 | 2.73 | 2.31 | 3.45 | 5.22 | 4.69 | 4.03 | 3.41 | 2.66 | 2.85 | 3.16 |
| MAX | 2.11 | 2.43 | 2.90 | 2.56 | 6.11 | 6.15 | 4.97 | 4.40 | 3.65 | 3.04 | 3.38 | 3.95 |
| MIN | 1.81 | 1.72 | 2.48 | 2.00 | 1.95 | 4.28 | 4.43 | 3.69 | 3.04 | 2.33 | 2.33 | 2.85 |

CAL YR 1980 MEAN 2.44 MAX 4.48 MIN 1.28
WTR YR 1981 MEAN 3.20 MAX 6.15 MIN 1.72

## 04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY
(National stream-quality accounting network station)
(National pesticide network station)

LOCATION.--Lat 44°59'46", long 73°21'37", Clinton County, Hydrologic Unit 02010006, on left bank at outlet of Lake Champlain in Rouses Point, and 1.0 mi (1.6 km) south of Fort Montgomery ruins. Water-quality sampling site at stage station.

DRAINAGE AREA.--8,277 mi² (21,437 km²).

### WATER-STAGE RECORDS

PERIOD OF RECORD.--October 1863 to December 1870 (maximum and minimum monthly gage heights at St. Johns, Quebec, published in WSP 97) and March 1871 to current year (daily gage heights prior to October 1970, elevations thereafter: those for 1871-1907 published in WSP 894). Gage heights prior to Oct. 1, 1925, published as "Richelieu River at Fort Montgomery, Rouses Point." Discharge records for January 1875 to September 1916 at "Chambly, Quebec," published in WSP 65, 82, 97, 129, 170, 206, 424, and 1307 have been found to be unreliable and should not be used. Daily discharge record for "Richelieu River at Fryers Rapids, Quebec," published in Water Survey of Canada annual reports.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. March 1871 to May 1923, nonrecording gage located in Fort Montgomery and May 1923 to October 1938, nonrecording gage at present site. Prior to October 1970, at datum 93.00 ft (28.346 m) higher.

REMARKS.--Area of lake surface about 490 mi² (1,269 km²). Total volume below 92.5 ft (28.19 m) elevation, reported by Lake Champlain Studies Center, 902.2 bil ft³ (25,600 hm³).

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 101.80 ft (31.029 m) Mar. 30, 1903; minimum observed, 92.17 ft (28.093 m) Oct. 23, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation known since at least 1827, 102.1 ft (31.12 m) May 4, 1869, from marks at railroad bridge near present gage, according to data published on p. 428 of the Report of the Board of Engineers on Deep Waterways, 1900: U.S. 56th Cong., 2d sess. H. Doc. 149.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 99.06 ft (30.193 m) Feb. 28, minimum, 94.35 ft (28.758 m) Nov. 8.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 94.88 | 94.71 | 95.39 | 95.41 | 94.87 | 98.96 | 97.59 | 97.21 | 96.51 | 95.89 | 95.28 | 96.07 |
| 2 | 94.91 | 94.68 | 95.43 | 95.39 | 94.90 | 98.98 | 97.47 | 97.15 | 96.53 | 95.88 | 95.26 | 96.03 |
| 3 | 94.79 | 94.92 | 95.27 | 95.36 | 95.06 | 98.92 | 97.77 | 97.13 | 96.56 | 95.92 | 95.22 | 95.94 |
| 4 | 94.85 | 95.03 | 95.28 | 95.35 | 95.19 | 98.89 | 97.85 | 97.08 | 96.43 | 95.89 | 95.22 | 95.89 |
| 5 | 94.91 | 94.61 | 95.44 | 95.35 | 95.26 | 98.82 | 97.79 | 97.08 | 96.42 | 95.79 | 95.23 | 95.81 |
| 6 | 94.94 | 94.77 | 95.49 | 95.36 | 95.30 | 98.75 | 97.74 | 96.91 | 96.42 | 95.77 | 95.18 | 95.74 |
| 7 | 94.97 | 94.69 | 95.52 | 95.33 | 95.32 | 98.68 | 97.80 | 96.88 | 96.35 | 95.75 | 95.24 | 95.76 |
| 8 | 95.12 | 94.60 | 95.58 | 95.31 | 95.32 | 98.65 | 97.88 | 96.89 | 96.46 | 95.71 | 95.29 | 95.87 |
| 9 | 94.86 | 95.01 | 95.53 | 95.29 | 95.37 | 98.59 | 97.80 | 96.89 | 96.48 | 95.68 | 95.35 | 95.74 |
| 10 | 94.94 | 94.73 | 95.70 | 95.25 | 95.37 | 98.51 | 97.74 | 96.75 | 96.45 | 95.66 | 95.40 | 95.92 |
| 11 | 94.93 | 94.69 | 95.72 | 95.24 | 95.40 | 98.45 | 97.75 | 96.75 | 96.45 | 95.60 | 95.44 | 95.78 |
| 12 | 94.88 | 94.77 | 95.81 | 95.22 | 95.59 | 98.40 | 97.65 | 96.69 | 96.47 | 95.60 | 95.47 | 95.88 |
| 13 | 94.82 | 94.90 | 95.72 | 95.21 | 95.84 | 98.31 | 97.73 | 96.80 | 96.45 | 95.58 | 95.46 | 95.90 |
| 14 | 94.77 | 94.85 | 95.74 | 95.20 | 95.98 | 98.16 | 98.13 | 96.89 | 96.55 | 95.49 | 95.44 | 95.90 |
| 15 | 94.81 | 94.88 | 95.70 | 95.17 | 96.07 | 98.13 | 97.39 | 96.98 | 96.46 | 95.48 | 95.50 | 95.85 |
| 16 | 94.80 | 94.83 | 95.66 | 95.16 | 96.14 | 97.97 | 97.58 | 96.99 | 96.41 | 95.50 | 95.58 | 95.77 |
| 17 | 94.85 | 94.89 | 95.70 | 95.14 | 96.15 | 97.96 | 97.52 | 96.96 | 96.31 | 95.52 | 95.73 | 95.76 |
| 18 | 94.92 | 94.78 | 95.78 | 95.15 | 96.22 | 97.86 | 97.41 | 97.01 | 96.33 | 95.47 | 95.99 | 95.80 |
| 19 | 94.77 | 94.89 | 95.64 | 95.12 | 96.35 | 97.78 | 97.44 | 97.02 | 96.31 | 95.46 | 96.19 | 95.80 |
| 20 | 94.74 | 94.95 | 95.65 | 95.09 | 96.52 | 97.69 | 97.39 | 97.03 | 96.19 | 95.53 | 96.24 | 95.73 |
| 21 | 94.77 | 95.02 | 95.64 | 95.08 | 96.86 | 97.58 | 97.33 | 97.01 | 96.18 | 95.37 | 96.24 | 95.68 |
| 22 | 94.68 | 94.85 | 95.66 | 95.05 | 97.26 | 97.56 | 97.37 | 96.91 | 96.20 | 95.33 | 96.26 | 95.65 |
| 23 | 94.64 | 94.97 | 95.64 | 95.03 | 97.59 | 97.49 | 97.36 | 96.85 | 96.08 | 95.28 | 96.28 | 95.55 |
| 24 | 94.68 | 94.91 | 95.57 | 95.01 | 97.81 | 97.40 | 97.34 | 96.84 | 96.11 | 95.30 | 96.18 | 96.00 |
| 25 | 94.75 | 94.87 | 95.55 | 95.00 | 98.24 | 97.32 | 97.33 | 96.80 | 96.16 | 95.39 | 96.12 | 96.42 |
| 26 | 94.81 | 94.94 | 95.61 | 95.00 | 98.65 | 97.29 | 97.35 | 96.75 | 96.03 | 95.41 | 96.14 | 96.62 |
| 27 | 94.78 | 95.04 | 95.52 | 94.94 | 98.86 | 97.20 | 97.34 | 96.69 | 96.03 | 95.18 | 96.17 | 96.82 |
| 28 | 94.77 | 95.15 | 95.53 | 94.91 | 98.99 | 97.20 | 97.32 | 96.67 | 96.01 | 95.17 | 96.09 | 96.72 |
| 29 | 94.77 | 95.27 | 95.46 | 94.90 | --- | 97.19 | 97.30 | 96.63 | 96.03 | 95.14 | 96.15 | 96.71 |
| 30 | 94.81 | 95.30 | 95.40 | 94.87 | --- | 97.17 | 97.26 | 96.61 | 96.02 | 95.22 | 96.14 | 96.73 |
| 31 | 94.91 | --- | 95.42 | 94.86 | --- | 97.24 | --- | 96.52 | --- | 95.28 | 96.08 | --- |
| MEAN | 94.83 | 94.88 | 95.57 | 95.15 | 96.30 | 98.04 | 97.56 | 96.88 | 96.31 | 95.52 | 95.73 | 95.99 |
| MAX | 95.12 | 95.30 | 95.81 | 95.41 | 98.99 | 98.98 | 98.13 | 97.21 | 96.56 | 95.92 | 96.28 | 96.82 |
| MIN | 94.64 | 94.60 | 95.27 | 94.86 | 94.87 | 97.17 | 97.26 | 96.52 | 96.01 | 95.14 | 95.18 | 95.55 |

CAL YR 1980 MEAN 95.31 MAX 97.34 MIN 94.13
WTR YR 1981 MEAN 96.06 MAX 98.99 MIN 94.60

## 04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

### WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966-67, 1969-72, 1974 to current year.
CHEMICAL DATA: 1966-67 (a), 1969 (b), 1970 (c), 1971-72 (b), 1974-81 (c).
MINOR ELEMENTS DATA: 1974-81 (b).
PESTICIDE DATA: 1976-79 (b), 1980 (a).
ORGANIC DATA: OC--1974 (a), 1975-77 (b), 1978 (a), 1979-81 (c).
PCB--1978-79 (b), 1980 (a).
NUTRIENT DATA: 1970 (c), 1971-72 (b), 1974 (b), 1975-81 (c).
BIOLOGICAL DATA:
Bacteria--1974 (a), 1975-81 (c).
Phytoplankton--1974 (a), 1975-78 (c), 1979 (b), 1980-81 (c).
Periphyton--1975 (c), 1976-80 (b).
SEDIMENT DATA: 1975-81 (c).

### WATER QUALITY DATA, WATER YEAR, OCTOBER 1980 TO SEPTEMBER 1981

| DATE | TIME | SPE-CIFIC CON-DUCT-ANCE (UMHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | TUR-BID-ITY (NTU) | BARO-METRIC PRES-SURE (MM OF HG) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) | STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) | HARD-NESS (MG/L AS CACO3) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 07... | 1300 | 144 | 7.5 | 14.0 | .40 | -- | -- | -- | K3 | K3 | 56 |
| NOV 05... | 1200 | 150 | 7.7 | 6.0 | .50 | 750 | 11.8 | 96 | K3 | <1 | 55 |
| MAR 30... | 1200 | 142 | 7.3 | 3.5 | 1.0 | 750 | 11.6 | 91 | K4 | <1 | 46 |
| APR 28... | 1200 | 180 | 7.5 | 7.5 | .70 | 760 | 8.6 | 74 | K7 | K3 | 57 |
| MAY 26... | 1200 | 147 | 7.8 | 15.5 | .45 | 760 | 12.8 | 132 | K4 | <1 | 51 |
| JUN 23... | 1100 | 136 | 6.7 | 19.5 | .70 | 760 | 8.4 | 94 | K6 | <1 | -- |
| JUL 22... | 1100 | 142 | 7.6 | 23.0 | .50 | 760 | 7.9 | 94 | K9 | K2 | 57 |
| AUG 19... | 1030 | 135 | 7.1 | 20.0 | 5.0 | 770 | 8.4 | 91 | K4 | K1 | 56 |
| SEP 01... | 1000 | 137 | 7.3 | 21.0 | .40 | 760 | 8.3 | 93 | K14 | K1 | 55 |

| DATE | HARD-NESS NONCAR-BONATE (MG/L AS CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | ALKA-LINITY LAB (MG/L AS CACO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 07... | 15 | 16 | 4.0 | 5.6 | 1.2 | 41 | 13 | 7.7 | .1 | .3 | 85 |
| NOV 05... | 12 | 15 | 4.2 | 5.9 | 1.9 | 43 | 14 | 8.2 | .0 | .2 | 87 |
| MAR 30... | 8.0 | 13 | 3.3 | 5.3 | 1.2 | 38 | 14 | 8.1 | <.1 | 1.2 | 118 |
| APR 28... | 22 | 16 | 4.2 | 6.6 | 1.3 | 35 | 13 | 7.9 | <.1 | .9 | 86 |
| MAY 26... | 15 | 15 | 3.4 | 5.3 | 1.2 | 36 | 13 | 8.2 | <.1 | .5 | 95 |
| JUN 23... | -- | -- | -- | -- | 1.3 | 43 | 12 | 7.7 | <.1 | -- | 88 |
| JUL 22... | 19 | 16 | 4.2 | 6.0 | 1.2 | 38 | 13 | 7.7 | <.1 | 1.2 | 86 |
| AUG 19... | 15 | 16 | 3.8 | 5.8 | 1.1 | 41 | 13 | 8.3 | <.1 | .7 | 82 |
| SEP 01... | 12 | 17 | 3.1 | 5.6 | .9 | 43 | 12 | 8.2 | <.1 | 6.1 | 90 |

K Results based on colony count outside the acceptable range (non-ideal colony count).

## 04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

### WATER QUALITY DATA, WATER YEAR, OCTOBER 1980 TO SEPTEMBER 1981

| DATE | SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) | NITROGEN, NO2+NO3 TOTAL (MG/L AS N) | NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) | NITROGEN, AMMONIA TOTAL (MG/L AS N) | NITROGEN, AMMONIA DISSOLVED (MG/L AS N) | NITROGEN, ORGANIC TOTAL (MG/L AS N) | NITROGEN, ORGANIC DISSOLVED (MG/L AS N) | NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) | NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) | NITROGEN, TOTAL (MG/L AS N) | NITROGEN, DISSOLV (MG/L AS N) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 07... | 73 | .20 | .03 | .030 | .030 | .20 | .19 | .23 | .22 | .43 | .25 |
| NOV 05... | 76 | .08 | .11 | .020 | .040 | .27 | .05 | .29 | .09 | .37 | .20 |
| MAR 30... | 70 | .29 | .26 | .040 | .040 | .43 | .24 | .47 | .28 | .76 | .54 |
| APR 28... | 72 | .29 | .27 | .020 | .060 | .46 | .25 | .48 | .31 | .77 | .58 |
| MAY 26... | 69 | .26 | .26 | .060 | .060 | .42 | .29 | .48 | .35 | .74 | .61 |
| JUN 23... | — | .11 | .12 | .010 | .040 | .35 | .31 | .36 | .35 | .47 | .47 |
| JUL 22... | 73 | .15 | .12 | .040 | .050 | .61 | .45 | .65 | .50 | .80 | .62 |
| AUG 19... | 74 | .04 | .05 | .040 | .020 | .35 | .33 | .39 | .35 | .43 | .40 |
| SEP 01... | 79 | .02 | .02 | .020 | .010 | .35 | — | .37 | .31 | .39 | .33 |

| DATE | PHOSPHORUS, TOTAL (MG/L AS P) | PHOSPHORUS, DISSOLVED (MG/L AS P) | ARSENIC TOTAL (UG/L AS AS) | ARSENIC DISSOLVED (UG/L AS AS) | BARIUM, TOTAL RECOVERABLE (UG/L AS BA) | BARIUM, DISSOLVED (UG/L AS BA) | CADMIUM TOTAL RECOVERABLE (UG/L AS CD) | CADMIUM DISSOLVED (UG/L AS CD) | CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) | CHROMIUM, DISSOLVED (UG/L AS CR) | COBALT, TOTAL RECOVERABLE (UG/L AS CO) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 07... | .020 | .010 | 1 | 2 | 100 | 10 | 0 | 1 | 10 | <10 | 0 |
| NOV 05... | .020 | .010 | — | — | — | — | — | — | — | — | — |
| MAR 30... | .020 | <.010 | 0 | 0 | 100 | 100 | 0 | 0 | <10 | <10 | 0 |
| APR 28... | .020 | <.010 | — | — | — | — | — | — | — | — | — |
| MAY 26... | .020 | <.010 | 0 | 0 | 100 | 10 | 1 | 4 | 10 | <10 | 1 |
| JUN 23... | .010 | .010 | — | 0 | — | — | — | — | — | — | — |
| JUL 22... | <.010 | <.010 | 1 | 1 | 100 | 10 | <1 | — | 20 | 10 | 2 |
| AUG 19... | .020 | <.010 | — | — | — | — | — | — | — | — | — |
| SEP 01... | <.010 | <.010 | — | — | — | — | — | — | — | — | — |

## 04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

### WATER QUALITY DATA, WATER YEAR, OCTOBER 1980 TO SEPTEMBER 1981

| DATE | COBALT, DIS-SOLVED (UG/L AS CO) | COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) | COPPER, DIS-SOLVED (UG/L AS CU) | IRON, TOTAL RECOV-ERABLE (UG/L AS FE) | IRON, DIS-SOLVED (UG/L AS FE) | LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) | LEAD, DIS-SOLVED (UG/L AS PB) | MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) | MERCURY DIS-SOLVED (UG/L AS HG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT<br>07... | 0 | 3 | 6 | 70 | 0 | 2 | 0 | 10 | 4 | .2 | .2 |
| NOV<br>05... | — | — | — | — | — | — | — | — | — | — | — |
| MAR<br>30... | 0 | 2 | 1 | 60 | 10 | 10 | 0 | 10 | 10 | .1 | <.1 |
| APR<br>28... | — | — | — | — | — | — | — | — | — | — | — |
| MAY<br>26... | 1 | 3 | 2 | 70 | <10 | 2 | 0 | 10 | <1 | .3 | .3 |
| JUN<br>23... | — | — | — | — | — | — | — | — | — | — | .2 |
| JUL<br>22... | 1 | 6 | 2 | 20 | <10 | 7 | 1 | 10 | 2 | <.1 | <.1 |
| AUG<br>19... | — | — | — | — | — | — | — | — | — | — | — |
| SEP<br>01... | — | — | — | — | — | — | — | — | — | — | — |

| DATE | NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) | NICKEL, DIS-SOLVED (UG/L AS NI) | SELE-NIUM, TOTAL (UG/L AS SE) | SELE-NIUM, DIS-SOLVED (UG/L AS SE) | SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) | SILVER, DIS-SOLVED (UG/L AS AG) | ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) | ZINC, DIS-SOLVED (UG/L AS ZN) | CARBON, ORGANIC TOTAL (MG/L AS C) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) | CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT<br>07... | 2 | 1 | 0 | 0 | — | — | 10 | 4 | — | 3.6 | .4 |
| NOV<br>05... | — | — | — | — | — | — | — | — | 4.5 | — | — |
| MAR<br>30... | 3 | 0 | 0 | 0 | 0 | 0 | 50 | 10 | — | 3.4 | .0 |
| APR<br>28... | — | — | — | — | — | — | — | — | 6.4 | — | — |
| MAY<br>26... | 4 | 1 | 0 | 0 | 0 | 0 | 30 | 9 | — | 3.1 | — |
| JUN<br>23... | — | — | — | — | — | 0 | — | — | — | — | — |
| JUL<br>22... | 7 | 1 | 0 | 0 | <1 | 0 | 10 | <4 | — | 15 | — |
| AUG<br>19... | — | — | — | — | — | — | — | — | 3.8 | — | — |
| SEP<br>01... | — | — | — | — | — | — | — | — | 2.9 | — | — |

## 04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

### WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | TIME | SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) | SAMP- LING DEPTH (FT) | DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET) | SPE- CIFIC CON- DUCT- ANCE (UMHOS) | PH (UNITS) | TEMPER- ATURE (DEG C) | OXYGEN, DIS- SOLVED (MG/L) |
|---|---|---|---|---|---|---|---|---|
| MAR | | | | | | | | |
| 30... | 1130 | 280 | 1.0 | 13.0 | 142 | 7.5 | 4.5 | 11.7 |
| 30... | 1131 | 280 | 5.0 | -- | 141 | 7.4 | 4.5 | 11.6 |
| 30... | 1132 | 280 | 10 | -- | 140 | 7.4 | 4.0 | 11.6 |
| 30... | 1201 | 550 | 1.0 | 19.0 | 143 | 7.4 | 4.0 | 11.6 |
| 30... | 1202 | 550 | 5.0 | -- | 142 | 7.3 | 4.0 | 11.6 |
| 30... | 1203 | 550 | 10 | -- | 141 | 7.3 | 4.0 | 11.6 |
| 30... | 1204 | 550 | 15 | -- | 141 | 7.3 | 4.0 | 11.6 |
| 30... | 1205 | 550 | 19 | -- | 141 | 7.4 | 4.0 | 11.5 |
| 30... | 1210 | 820 | 1.0 | 26.0 | 143 | 7.5 | 3.5 | 11.6 |
| 30... | 1211 | 820 | 5.0 | -- | 142 | 7.3 | 3.5 | 11.6 |
| 30... | 1212 | 820 | 10 | -- | 141 | 7.3 | 3.5 | 11.6 |
| 30... | 1213 | 820 | 15 | -- | 141 | 7.3 | 3.5 | 11.7 |
| 30... | 1214 | 820 | 20 | -- | 140 | 7.4 | 3.5 | 11.6 |
| 30... | 1215 | 820 | 25 | -- | 140 | 7.4 | 3.5 | 11.7 |
| 30... | 1225 | 1100 | 1.0 | 17.0 | 138 | 7.8 | 3.0 | 11.8 |
| 30... | 1226 | 1100 | 5.0 | -- | 137 | 7.7 | 3.0 | 11.8 |
| 30... | 1227 | 1100 | 10 | -- | 137 | 7.7 | 3.0 | 11.8 |
| 30... | 1228 | 1100 | 15 | -- | 137 | 7.6 | 3.0 | 11.8 |
| 30... | 1235 | 1380 | 1.0 | 14.0 | 137 | 7.8 | 2.0 | 11.9 |
| 30... | 1236 | 1380 | 5.0 | -- | 136 | 7.7 | 2.0 | 11.8 |
| 30... | 1237 | 1380 | 10 | -- | 136 | 7.8 | 2.0 | 11.8 |
| 30... | 1238 | 1380 | 14 | -- | 136 | 7.7 | 2.0 | 11.8 |
| JUL | | | | | | | | |
| 22... | 1030 | 280 | 1.0 | 10.2 | 142 | 7.1 | 22.5 | 8.3 |
| 22... | 1032 | 280 | 5.0 | 10.2 | 142 | 7.3 | 22.5 | 7.9 |
| 22... | 1034 | 280 | 10 | 10.2 | 142 | 7.3 | 22.0 | 7.6 |
| 22... | 1040 | 550 | 1.0 | 20.2 | 142 | 7.7 | 22.5 | 8.0 |
| 22... | 1042 | 550 | 5.0 | 20.2 | 143 | 7.6 | 22.5 | 7.9 |
| 22... | 1044 | 550 | 10 | 20.2 | 143 | 7.5 | 22.5 | 7.5 |
| 22... | 1046 | 550 | 15 | 20.2 | 143 | 7.4 | 22.5 | 7.7 |
| 22... | 1048 | 550 | 20 | 20.2 | 143 | 7.3 | 22.5 | 7.2 |
| 22... | 1102 | 820 | 1.0 | 22.3 | 142 | 7.6 | 23.0 | 8.2 |
| 22... | 1104 | 820 | 5.0 | 22.3 | 142 | 7.6 | 23.0 | 7.9 |
| 22... | 1106 | 820 | 10 | 22.3 | 143 | 7.6 | 22.5 | 7.8 |
| 22... | 1108 | 820 | 15 | 22.3 | 143 | 7.5 | 22.5 | 7.6 |
| 22... | 1110 | 820 | 20 | 22.3 | 143 | 7.4 | 22.5 | 7.9 |
| 22... | 1112 | 820 | 22 | 22.3 | 143 | 7.6 | 22.5 | 7.7 |
| 22... | 1120 | 1100 | 1.0 | 14.0 | 144 | 7.6 | 22.5 | 8.2 |
| 22... | 1122 | 1100 | 5.0 | 14.0 | 144 | 7.6 | 22.5 | 8.0 |
| 22... | 1124 | 1100 | 10 | 14.0 | 144 | 7.6 | 22.5 | 7.9 |
| 22... | 1126 | 1100 | 14 | 14.0 | 144 | 7.6 | 22.5 | 8.1 |
| 22... | 1130 | 1380 | 1.0 | 12.1 | 143 | 7.8 | 23.0 | 8.3 |
| 22... | 1132 | 1380 | 5.0 | 12.1 | 144 | 7.6 | 23.0 | 8.0 |
| 22... | 1134 | 1380 | 10 | 12.1 | 144 | 7.6 | 23.0 | 8.1 |
| 22... | 1136 | 1380 | 12 | 12.1 | 144 | 7.6 | 22.5 | 8.2 |

### SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | TIME | SEDI- MENT, SUS- PENDED (MG/L) | DATE | TIME | SEDI- MENT, SUS- PENDED (MG/L) |
|---|---|---|---|---|---|
| OCT | | | JUN | | |
| 07... | 1300 | 1 | 23... | 1100 | 1 |
| NOV | | | JUL | | |
| 05... | 1200 | 7 | 22... | 1100 | 1 |
| MAR | | | AUG | | |
| 30... | 1200 | 2 | 19... | 1030 | 1 |
| APR | | | SEP | | |
| 28... | 1200 | 3 | 01... | 1000 | 1 |
| MAY | | | | | |
| 26... | 1200 | 6 | | | |

## 04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

### QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

### PHYTOPLANKTON

| DATE | NOV 5,80 | MAR 30,81 | MAY 26,81 | JUN 23,81 |
|---|---|---|---|---|
| TIME | 1200 | 1200 | 1200 | 1100 |
| TOTAL CELLS/ML | 230 | 560 | 550 | 77 |
| DIVERSITY: DIVISION | 1.6 | 0.4 | 1.6 | 0.7 |
| .CLASS | 1.6 | 0.4 | 1.6 | 0.7 |
| ..ORDER | 2.3 | 1.3 | 2.1 | 0.7 |
| ...FAMILY | 2.4 | 1.4 | 2.1 | 0.7 |
| ....GENUS | 2.7 | 2.1 | 2.4 | 0.7 |

| ORGANISM | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT |
|---|---|---|---|---|---|---|---|---|
| CHLOROPHYTA (GREEN ALGAE) | | | | | | | | |
| .CHLOROPHYCEAE | | | | | | | | |
| ..CHLOROCOCCALES | | | | | | | | |
| ...MICRACTINIACEAE | | | | | | | | |
| ....MICRACTINIUM | -- | - | -- | - | -- | - | -- | - |
| ...OOCYSTACEAE | | | | | | | | |
| ....ANKISTRODESMUS | 26 | 11 | -- | - | 140# | 25 | -- | - |
| ....KIRCHNERIELLA | -- | - | -- | - | -- | - | -- | - |
| ...SCENEDESMACEAE | | | | | | | | |
| ....SCENEDESMUS | -- | - | -- | - | -- | - | -- | - |
| ..VOLVOCALES | | | | | | | | |
| ...CHLAMYDOMONADACEAE | | | | | | | | |
| ....CHLAMYDOMONAS | 13 | 6 | 13 | 2 | -- | - | -- | - |
| CHRYSOPHYTA | | | | | | | | |
| .BACILLARIOPHYCEAE | | | | | | | | |
| ..CENTRALES | | | | | | | | |
| ...COSCINODISCACEAE | | | | | | | | |
| ....CYCLOTELLA | 64# | 28 | -- | - | 69 | 13 | -- | - |
| ....MELOSIRA | 26 | 11 | 180# | 33 | 28 | 5 | 13# | 17 |
| ....STEPHANODISCUS | -- | - | 160# | 28 | 14 | 2 | -- | - |
| ..PENNALES | | | | | | | | |
| ...ACHNANTHACEAE | | | | | | | | |
| ....ACHNANTHES | -- | - | -- | - | 14 | 2 | -- | - |
| ....COCCONEIS | -- | - | -- | - | -- | - | -- | - |
| ...FRAGILARIACEAE | | | | | | | | |
| ....ASTERIONELLA | -- | - | 160# | 28 | -- | - | -- | - |
| ....SYNEDRA | -- | - | 13 | 2 | -- | - | -- | - |
| ...NAVICULACEAE | | | | | | | | |
| ....NAVICULA | 13 | 6 | -- | - | -- | - | -- | - |
| ...NITZSCHIACEAE | | | | | | | | |
| ....NITZSCHIA | 26 | 11 | 13 | 2 | -- | - | -- | - |
| .CHRYSOPHYCEAE | | | | | | | | |
| ..CHRYSOMONADALES | | | | | | | | |
| ...MALLOMONADACEAE | | | | | | | | |
| ....MALLOMONAS | -- | - | -- | - | -- | - | -- | - |
| ...OCHROMONADACEAE | | | | | | | | |
| ....OCHROMONAS | -- | - | -- | - | -- | - | -- | - |
| CRYPTOPHYTA (CRYPTOMONADS) | | | | | | | | |
| .CRYPTOPHYCEAE | | | | | | | | |
| ..CRYPTOMONADALES | | | | | | | | |
| ...CRYPTOCHRYSIDACEAE | | | | | | | | |
| ....CHROOMONAS | -- | - | -- | - | -- | - | -- | - |
| CYANOPHYTA (BLUE-GREEN ALGAE) | | | | | | | | |
| .CYANOPHYCEAE | | | | | | | | |
| ..CHROOCOCCALES | | | | | | | | |
| ...CHROOCOCCACEAE | | | | | | | | |
| ....ANACYSTIS | 51# | 22 | -- | - | 69 | 13 | 64# | 83 |
| ..HORMOGONALES | | | | | | | | |
| ...OSCILLATORIACEAE | | | | | | | | |
| ....OSCILLATORIA | -- | - | -- | - | 210# | 38 | -- | - |
| PYRRHOPHYTA (FIRE ALGAE) | | | | | | | | |
| .DINOPHYCEAE | | | | | | | | |
| ..PERIDINIALES | | | | | | | | |
| ...GLENODINIACEAE | | | | | | | | |
| ....GLENODINIUM | 13 | 6 | 26 | 5 | 14 | 2 | -- | - |

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

## 04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

### QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

### PHYTOPLANKTON

| | JUL 22,81 | AUG 19,81 | SEP 1,81 |
|---|---|---|---|
| DATE | JUL 22,81 | AUG 19,81 | SEP 1,81 |
| TIME | 1100 | 1030 | 1000 |
| TOTAL CELLS/ML | 120 | 2000 | 590 |
| DIVERSITY: DIVISION | 1.7 | 1.1 | 0.6 |
| .CLASS | 1.7 | 1.2 | 0.6 |
| ..ORDER | 1.7 | 1.4 | 0.6 |
| ...FAMILY | 1.7 | 1.5 | 0.7 |
| ....GENUS | 1.7 | 1.6 | 0.7 |

| ORGANISM | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT | CELLS /ML | PER- CENT |
|---|---|---|---|---|---|---|
| CHLOROPHYTA (GREEN ALGAE) | | | | | | |
| .CHLOROPHYCEAE | | | | | | |
| ..CHLOROCOCCALES | | | | | | |
| ...MICRACTINIACEAE | | | | | | |
| ....MICRACTINIUM | 13 | 11 | -- | - | -- | - |
| ...OOCYSTACEAE | | | | | | |
| ....ANKISTRODESMUS | -- | - | 62 | 3 | -- | - |
| ....KIRCHNERIELLA | -- | - | 78 | 4 | -- | - |
| ...SCENEDESMACEAE | | | | | | |
| ....SCENEDESMUS | -- | - | 93 | 5 | -- | - |
| ..VOLVOCALES | | | | | | |
| ...CHLAMYDOMONADACEAE | | | | | | |
| ....CHLAMYDOMONAS | -- | - | 47 | 2 | -- | - |
| CHRYSOPHYTA | | | | | | |
| .BACILLARIOPHYCEAE | | | | | | |
| ..CENTRALES | | | | | | |
| ...COSCINODISCACEAE | | | | | | |
| ....CYCLOTELLA | 26# | 22 | 93 | 5 | -- | - |
| ....MELOSIRA | -- | - | -- | - | -- | - |
| ....STEPHANODISCUS | -- | - | -- | - | -- | - |
| ..PENNALES | | | | | | |
| ...ACHNANTHACEAE | | | | | | |
| ....ACHNANTHES | -- | - | -- | - | -- | - |
| ....COCCONEIS | -- | - | -- | - | 43 | 7 |
| ...FRAGILARIACEAE | | | | | | |
| ....ASTERIONELLA | -- | - | -- | - | -- | - |
| ....SYNEDRA | -- | - | 16 | 1 | -- | - |
| ...NAVICULACEAE | | | | | | |
| ....NAVICULA | -- | - | -- | - | 43 | 7 |
| ...NITZSCHIACEAE | | | | | | |
| ....NITZSCHIA | -- | - | -- | - | -- | - |
| .CHRYSOPHYCEAE | | | | | | |
| ..CHRYSOMONADALES | | | | | | |
| ...MALLOMONADACEAE | | | | | | |
| ....MALLOMONAS | -- | - | 31 | 2 | -- | - |
| ...OCHROMONADACEAE | | | | | | |
| ....OCHROMONAS | -- | - | 78 | 4 | -- | - |
| CRYPTOPHYTA (CRYPTOMONADS) | | | | | | |
| .CRYPTOPHYCEAE | | | | | | |
| ..CRYPTOMONADALES | | | | | | |
| ...CRYPTOCHRYSIDACEAE | | | | | | |
| ....CHROOMONAS | -- | - | 16 | 1 | -- | - |
| CYANOPHYTA (BLUE-GREEN ALGAE) | | | | | | |
| .CYANOPHYCEAE | | | | | | |
| ..CHROOCOCCALES | | | | | | |
| ...CHROOCOCCACEAE | | | | | | |
| ....ANACYSTIS | 64# | 56 | 1500# | 74 | -- | - |
| ..HORMOGONALES | | | | | | |
| ...OSCILLATORIACEAE | | | | | | |
| ....OSCILLATORIA | -- | - | -- | - | 500# | 85 |
| PYRRHOPHYTA (FIRE ALGAE) | | | | | | |
| .DINOPHYCEAE | | | | | | |
| ..PERIDINIALES | | | | | | |
| ...GLENODINIACEAE | | | | | | |
| ....GLENODINIUM | 13 | 11 | -- | - | -- | - |

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

## LAKES AND RESERVOIRS IN STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04260990 CRANBERRY LAKE AT CRANBERRY LAKE, NY--Lat 44°13'14", long 74°50'55", St. Lawrence County, Hydrologic Unit 04150302, on right wall at outlet structure, at village of Cranberry Lake. DRAINAGE AREA, 144 $mi^2$ (373 $km^2$). PERIOD OF RECORD, April 1923 to current year. GAGE, nonrecording gage read daily at 1200 hours. Datum of gage is 1,469.75 ft (447.980 m) National Geodetic Vertical Datum of 1929.

Dam completed in 1867 and controlled storage for which records are available began in 1923. Usable capacity above elevation 1,475.25 ft (449.656 m) is 2,530 mil $ft^3$ (71.6 $hm^3$). Crest at spillway is at elevation, 1,486.43 ft (453.064 m). Length of spillway is 110 ft (34 m). Area of water surface at crest elevation is 10.9 $mi^2$ (28.2 $km^2$). Records furnished by Oswegatchie River-Cranberry Reservoir Commission.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 2,985 mil $ft^3$ (84.5 $hm^3$) May 13-15, 1971, gage height, 18.5 ft (5.64 m); minimum observed, 70 mil $ft^3$ (1.98 $hm^3$) Apr. 1-4, 1956, gage height, 6.0 ft (1.83 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 2,380 mil $ft^3$ (67.4 $hm^3$) Nov. 10-11, May 16-20, June 28-29, gage height, 16.5 ft (5.03 m); minimum observed, 1,340 mil $ft^3$ (37.9 $hm^3$) Feb. 1, gage height, 12.5 ft (3.81 m).

04266700 CARRY FALLS RESERVOIR NEAR SOUTH COLTON, NY--Lat 44°26'07", long 74°44'50", St. Lawrence County, Hydrologic Unit 04150305, near center of upstream wall of dam between Carry Falls and Stark Falls Reservoirs, 2.0 mi (3.2 km) southeast of Stark, and 8.8 mi (14.2 km) southeast of South Colton. DRAINAGE AREA, 873 $mi^2$ (2,261 $km^2$). PERIOD OF RECORD, October 1954 to current year. GAGE, nonrecording gage read daily at 0800 hours. Datum of gage is National Geodetic Vertical Datum of 1929.

Dam completed January 1953 and controlled storage for which records are available began in October 1954. Usable capacity above elevation 1,332.0 ft (405.99 m) is 5,114.9 mil $ft^3$ (145 $hm^3$). Crest at spillway is at elevation 1,386.0 ft (422.45 m). Length of spillway is 830 ft (253 m). Area of water surface at crest elevation is 5.16 $mi^2$ or 13.4 $km^2$ (3,300 acres or 1,300 $hm^2$). The pond has a length of 6 mi (10 km) and a perimeter of 25 mi (40 km). Below crest elevation, capacity controlled by a taintor gate, 27 ft x 15 ft (8m x 5m), and 2 sluice gates, 10 ft x 10 ft (3m x 3m). Records furnished by Niagara Mohawk Power Corp.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 5,146 mil $ft^3$ (146 $hm^3$) June 1, 5, 6, 1955, elevation, 1,386.1 ft (422.48 m); minimum observed, 8.64 mil $ft^3$ (0.245 $hm^3$) Mar. 27-30, 1963, Apr. 4-11, 1964, elevation, 1,331.0 ft (405.69 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 5,091 mil $ft^3$ (144 $hm^3$) May 21, elevation, 1,385.7 ft (422.36 m); minimum observed, 1,531 mil $ft^3$ (43.4 $hm^3$) Feb. 12, elevation, 1,355.2 ft (413.06 m).

04273900 LAKE PLACID AT LAKE PLACID, NY (see station for daily mean elevations).

04278000 LAKE GEORGE AT ROGERS ROCK, NY (see station for daily mean gage heights).

04294500 LAKE CHAMPLAIN AT BURLINGTON, VT (see station for daily mean gage heights).

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY (see station for daily mean elevations).

### MONTHEND GAGE HEIGHT, ELEVATION, AND CONTENTS, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| Date | Gage height (feet) | Contents (million $ft^3$) | Change in contents (equivalent in $ft^3/s$) | Elevation (feet) | Contents (million $ft^3$) | Change in contents (equivalent in $ft^3/s$) |
|---|---|---|---|---|---|---|
| | 04260990 Cranberry Lake* | | | 04266700 Carry Falls Reservoir** | | |
| Sept. 30 | 15.8 | 2,184 | | 1,373.8 | 3,500.9 | |
| Oct. 31 | 16.2 | 2,296 | + 41.8 | 1,366.8 | 2,692.2 | - 302 |
| Nov. 30 | 14.2 | 1,762 | -206 | 1,375.3 | 3,693.6 | + 386 |
| Dec. 31 | 13.5 | 1,580 | - 67.9 | 1,374.2 | 3,551.0 | - 53.2 |
| CAL YR 1980 | | | - 5.75 | | | - 2.46 |
| Jan. 31 | 12.6 | 1,364 | - 80.6 | 1,357.5 | 1,749.6 | - 673 |
| Feb. 28 | 14.8 | 1,918 | +229 | 1,379.6 | 4,250.9 | + 1034 |
| Mar. 31 | 13.5 | 1,580 | -126 | 1,371.6 | 3,234.8 | - 379 |
| Apr. 30 | 16.3 | 2,324 | +287 | 1,383.7 | 4,814.2 | + 609 |
| May 31 | 16.2 | 2,296 | - 10.5 | 1,384.6 | 4,938.6 | + 46.4 |
| June 30 | 16.4 | 2,352 | + 21.6 | 1,382.8 | 4,689.8 | - 96.0 |
| July 31 | 16.0 | 2,240 | - 41.8 | 1,375.1 | 3,667.7 | - 382 |
| Aug. 31 | 15.6 | 2,128 | - 41.8 | 1,379.3 | 4,212.0 | + 203 |
| Sept. 30 | 15.9 | 2,212 | + 32.4 | 1,384.2 | 4,883.3 | + 259 |
| WTR YR 1981 | | | + 0.89 | | | + 43.8 |

* Gage height at 2400 hours by interpolation
** Elevation at 2400 hours by interpolation

# DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

## Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. These measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream when continuous records are available, will give a picture of the low-flow potentiality of a stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

### DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1981

| STATION NO. | STATION NAME | LOCATION | DRAINAGE AREA (SQ MI) | MILES ABOVE MOUTH | PERIOD OF RECORD | MEASUREMENTS DATE | MEASUREMENTS DISCHARGE (CFS) |
|---|---|---|---|---|---|---|---|
| | | HUDSON RIVER BASIN | | | | | |
| 01334773 | OWL KILL NEAR CAMBRIDGE, NY | LAT 43 00 36, LONG 73 23 09, WASHINGTON COUNTY, HYDROLOGIC UNIT 02020003, AT COUNTY ROAD 200 FT (61 M) UPSTREAM OF WHITE CREEK AND 1.2 MI (1.9 KM) SOUTH OF CAMBRIDGE. | -- | -- | 1980-81 | 06-30-81 | 7.43 |
| 01334785 | WHITE CREEK NEAR CAMBRIDGE, NY | LAT 43 00 37, LONG 73 22 57, WASHINGTON COUNTY, HYDROLOGIC UNIT 02020003, AT COUNTY ROAD, 1.2 MI (1.9 KM) SOUTH OF CAMBRIDGE. | -- | 0.3 | 1980-81 | 06-30-81 | 7.43 |
| 01334800 | OWL KILL AT EAGLE BRIDGE, NY | LAT 42 57 08, LONG 73 22 57, WASHINGTON COUNTY, HYDROLOGIC UNIT 02020003, AT BRIDGE UPSTREAM FROM BRIDGE ON STATE HIGHWAY 67, AT EAGLE BRIDGE, RENSSELAER COUNTY. | 56.4 | -- | 1949<br>1956-61<br>1964<br>1980-81 | 06-30-81 | 27.3 |
| 01349075 | BRIMSTONE CREEK AT SHARON SPRINGS, NY | LAT 42 48 00, LONG 74 37 01, SCHOHARIE COUNTY, HYDROLOGIC UNIT 02020004, AT BRIDGE ON STATE HIGHWAY 10, 0.1 MI (0.2 KM) NORTH OF SHARON SPRINGS, AND 0.8 MI (1.3 KM) NORTH OF U.S. HIGHWAY 20. | 2.44 | -- | 1977<br>1980-81 | 06-30-81 | 1.76 |
| 01349080 | BRIMSTONE CREEK NEAR AMES, NY | LAT 42 49 20, LONG 74 35 40, MONTGOMERY COUNTY, HYDROLOGIC UNIT 02020004, AT BRIDGE ON STATE HIGHWAY 10, 0.2 MI (0.3 KM) NORTH OF COUNTY LINE, AND 1.2 MI (1.9 KM) SOUTH OF AMES. | 7.61 | 2.4 | 1977<br>1980-81 | 06-30-81 | 2.11 |
| 01349495 | CAYADUTTA CREEK NEAR JOHNSTOWN, NY | LAT 42 59 36, LONG 74 23 54, FULTON COUNTY, HYDROLOGIC UNIT 02020004, AT BRIDGE 100 FT (30 M) UPSTREAM OF JOHNSTOWN SEWAGE TREATMENT PLANT, 200 FT (61 M) DOWNSTREAM OF UNNAMED TRIBUTARY, AND 1 MI (1.6 KM) SOUTHEAST OF JOHNSTOWN CITY BOUNDARY LINE. | -- | -- | 1980-81 | 06-30-81 | 14.9 |

## DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1981--CONTINUED

| STATION NO. | STATION NAME | LOCATION | DRAINAGE AREA (SQ MI) | MILES ABOVE MOUTH | PERIOD OF RECORD | MEASUREMENTS | |
|---|---|---|---|---|---|---|---|
| | | | | | | DATE | DISCHARGE (CFS) |
| | | HUDSON RIVER BASIN--Continued | | | | | |
| 0135980270 | MUITZES KILL NEAR CASTLETON-ON-HUDSON | LAT 42°30'58", LONG 73°45'24", RENSSELAER COUNTY, HYDROLOGIC UNIT 02020006, AT ROAD CROSSING 0.3 MI (0.5 KM) EAST OF STATE ROUTE 9J, 0.4 MI (0.6 KM) UPSTREAM OF MOUTH, AND 1 MI (1.6 KM) SOUTH OF CASTLETON-ON-HUDSON. | | | 1980-81 | 05-30-80<br>06-24-80<br>08-19-80<br>08-03-81 | 5.18<br>5.24<br>5.12<br>3.64 |
| 01372004 | SWARTE KILL AT RIFTON, NY | LAT 41 49 56, LONG 74 01 55, ULSTER COUNTY, HYDROLOGIC UNIT 02020007, AT BRIDGE ON HARDENBURG ROAD, 0.6 MI (1.0 KM) SOUTHEAST OF RIFTON. | 14.4 | 1.7 | 1978<br>1980-81 | 06-30-81<br>08-04-81<br>08-10-81<br>08-24-81 | 4.55<br>.37<br>.20<br>.00 |
| 01372068 | LATTINTOWN CREEK NEAR MARLBORO, NY | LAT 41 37 09, LONG 73 59 30, ULSTER COUNTY HYDROLOGIC UNIT 02020008, AT BRIDGE AT INTERSECTION OF LATTINTOWN - RIDGE ROADS, 1.4 MI (2.2 KM) NORTHWEST OF MARLBORO. | 8.32 | 2.5 | 1978<br>1980-81 | 06-30-81<br>08-04-81<br>08-10-81<br>08-24-81 | 2.01<br>.38<br>.29<br>.08 |
| | | DELAWARE RIVER BASIN | | | | | |
| 01432850 | MIDDLE MONGAUP RIVER AT LIBERTY, NY | LAT 41 47 26, LONG 74 43 55, SULLIVAN COUNTY HYDROLOGIC UNIT 02040104, AT BRIDGE ON STATE HIGHWAY 17, AT LIBERTY. | -- | -- | 1965<br>1980-81 | 06-30-81<br>07-13-81<br>07-17-81<br>08-24-81 | 3.70<br>2.01<br>1.35<br>2.14 |
| 01432872 | EAST MONGAUP RIVER TRIBUTARY AT HURLEYVILLE, NY | LAT 41 44 05, LONG 74 40 56, SULLIVAN COUNTY HYDROLOGIC UNIT 02040104, AT CULVERT ON TOWN ROAD, 0.4 MI (0.6 KM) WEST OF HURLEYVILLE. | -- | .8 | 1980-81 | 06-30-81<br>07-13-81<br>07-17-81<br>08-24-81 | 2.06<br>1.82<br>1.14<br>.31 |
| 01432915 | WHITE LAKE BROOK AT WHITE LAKE, NY | LAT 41 40 30, LONG 74 49 11, SULLIVAN COUNTY, HYDROLOGIC UNIT 02040104, AT BRIDGE ON STATE HIGHWAY 17B, 2.4 MI (3.9 KM) DOWNSTREAM FROM BISHOPS POND, 0.9 MI (1.4 KM) UPSTREAM FROM MOUNTAIN LAKE, AND 0.5 MI (0.8 KM) EAST OF WHITE LAKE. | 6.81 | -- | 1978<br>1980-81 | 06-30-81<br>07-13-81<br>07-17-81<br>08-24-81 | 5.81<br>2.19<br>1.06<br>.00 |
| 01432920 | WHITE LAKE BROOK AT SMALLWOOD, NY | LAT 41 39 29, LONG 74 48 39, SULLIVAN COUNTY, HYDROLOGIC UNIT 02040104, AT BRIDGE ON PINE GROVE ROAD, 0.1 MI (0.2 KM) DOWNSTREAM FROM MOUNTAIN LAKE, 2.6 MI (4.2 KM) UPSTREAM FROM SWINGING BRIDGE RESERVOIR, AND 0.8 MI (1.3 KM) SOUTHEAST OF SMALLWOOD. | 8.63 | -- | 1978<br>1980-81 | 06-30-81<br>07-13-81<br>07-17-81<br>08-24-81 | 3.77<br>2.22<br>2.03<br>.94 |
| | | STREAMS TRIBUTARY TO ST. LAWRENCE RIVER | | | | | |
| 04276760 | MILL BROOK AT MORIAH CENTER, NY | LAT 44 03 40, LONG 73 30 30, ESSEX COUNTY, HYDROLOGIC UNIT 02010001, AT BRIDGE ON COUNTY ROAD AT MORIAH CENTER. | 17.5 | -- | 1966<br>1977<br>1980-81 | 06-03-81<br>07-01-81 | 14.3<br>6.96 |

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

### Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain, but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1981

| | | | | | Annual maximum | | |
|---|---|---|---|---|---|---|---|
| Station No. | Station name | Location | Drainage area (mi²) | Period of record | Date | Gage height (feet) | Discharge (ft³/s) |
| | | Housatonic River basin | | | | | |
| 01199477 | Stony Brook near Dover Plains, NY | Lat 41°42'38", long 73°37'18", Dutchess County, Hydrologic Unit 01100005, on town road, 100 ft (30 m) upstream from mouth, and 2.9 mi (4.7 km) southwest of Dover Plains. | 1.93 | 1976-81 | 5-12-81 | 2.57 | 177 |
| | | Hudson River basin | | | | | |
| 01319800 | West Branch Sacandaga River at Arietta, NY | Lat 43°15'05", long 74°31'06", Hamilton County, Hydrologic Unit 02020002, at bridge on State Highway 10, 0.4 mi (0.6 km) north of Arietta. | 28.9 | 1963-81 | 2-20-81 | 13.3 | - |
| 01319950 | Sand Lake Outlet near Piseco, NY | Lat 43°22'15", long 74°32'47", Hamilton County, Hydrologic Unit 02020002, at bridge on State Highway 10, 0.9 mi (1.4 km) upstream from mouth and 5.5 mi (8.8 km) south of Piseco. | 7.16 | 1962-66,<br>1968-81 | 2-20-81 | 5.41 | - |
| 01329154 | Steele Brook at Shushan, NY | Lat 43°05'35", long 73°19'38", Washington County, Hydrologic Unit 02020003, at bridge on county road, 1.1 mi (1.8 km) upstream from mouth, and 0.8 mi (1.3 km) east of Shushan. | 2.85 | 1979-81 | 2-20-81 | 4.13 | 64 |
| 01329780 | Sessions Brook at Porters Corners, NY | Lat 43°09'21", long 73°52'45", Saratoga County, Hydrologic Unit 02020003, at culvert on County Highway 17, 0.7 mi (1.1 km) northeast of Porters Corners, and 0.9 mi (1.4 km) upstream from mouth. | 1.04 | 1976,<br>1978-81 | 2-20-81 | 9.94 | 16 |
| 01329900 | Glowegee Creek tributary at Mosherville, NY | Lat 43°03'24", long 74°00'58", Saratoga County, Hydrologic Unit 02020003, at culvert on Parkis Mill Road, 0.4 mi (0.6 km) south of Mosherville. | 1.42 | 1968-75<br>1979-81 | 3- 6-79<br>3-22-80<br>2-20-81 | 12.02<br>12.40<br>12.14 | 63<br>87<br>70 |
| 01330880 | Saratoga Lake tributary near Bemis Heights, NY | Lat 42°59'43", long 73°43'06", Saratoga County, Hydrologic Unit 02020003, at culvert on State Highway 423, 1.4 mi (2.3 km) upstream from mouth, and 4.6 mi (7.4 km) northwest of Bemis Heights. | 2.98 | 1968,<br>1970-71,<br>1973,<br>1975-81 | 2-20-81 | 11.79 | 66 |
| 01333567 | Little Hoosic River at Cherry Plain, NY | Lat 42°37'57", long 73°21'23", Rensselaer County, Hydrologic Unit 02020003, at bridge on town road, just upstream from Kronk Brook, in Cherry Plain, 4.2 mi (6.8 km) south of Berlin. | 2.22 | 1976-78,<br>1980-81 | 2-11-81 | 2.79 | 138 |

Annual maximum discharge at crest-stage partial-record stations during water year 1981--Continued

| | | | | | Annual maximum | | |
|---|---|---|---|---|---|---|---|
| Station No. | Station name | Location | Drainage area ($mi^2$) | Period of record | Date | Gage height (feet) | Discharge ($ft^3/s$) |
| | | Hudson River basin--Continued | | | | | |
| 01342730 | Steele Creek at Illion, NY | Lat 43°00'05", long 75°02'44", Herkimer County, Hydrologic Unit 02020004, at bridge on Whitney Street in Illion, and 2.6 mi (4.2 km) upstream from mouth. | 26.1 | 1964-65<br>1966-68*<br>1969<br>1971-74<br>1976-78<br>1981 | 2-20-81 | 5.30 | - |
| 01346820 | Mohawk River tributary at Indian Castle, NY | Lat 43°00'34", long 74°47'47", Herkimer County, Hydrologic Unit 02020004, at culvert on State Highway 5S, 0.35 mi (0.6 km) west of Indian Castle, and 0.4 mi (0.7 km) upstream from mouth. | 1.40 | 1974-81 | 2-20-81 | 3.20 | 120 |
| 01347460 | Spruce Lake tributary near Salisbury Center, NY | Lat 43°10'51", long 74°48'44", Herkimer County, Hydrologic Unit 02020004, at culvert on town road (Jerseyfield Road), 1.3 mi (2.1 km) upstream from mouth, and 2.9 mi (4.7 km) north of Salisbury Center. | .53 | 1978-81 | 6-17-81 | 2.55 | 24 |
| 01348420 | North Creek near Ephratah, NY | Lat 43°00'28", long 74°33'54", Fulton County, Hydrologic Unit 02020004, at culvert on town road, 0.4 mi (0.7 km) upstream from mouth, and 1.2 mi (1.9 km) northwest of Ephratah. | 6.68 | 1975-81 | 2-20-81 | 6.66 | 277 |
| 01349360 | Van Wie Creek tributary near Randall, NY | Lat 42°54'11", long 74°25'55", Montgomery County, Hydrologic Unit 02020004, at culvert on Brumley Road, 0.3 mi (0.5 km) south of intersection with Argisinger Road, and 0.9 mi (1.4 km) southwest of Randall. | 1.00 | 1974-81 | 2-20-81 | 5.63 | 110 |
| 01349850 | Batavia Kill at Hensonville, NY | Lat 42°22'17", long 74°12'55", Greene County, Hydrologic Unit 02020005, on County Highway 40, at Hensonville, 0.7 mi (1.1 km) upstream from Silver Lake Outlet, and 1.8 mi (2.9 km) upstream from Mauvo Stream. | 13.5 | 1955,<br>1960-66,<br>1972,<br>1974,<br>1976,<br>1978-81 | 2-11-81<br>2-20-81 | b4.41<br>3.56 | -<br>755 |
| 01350900 | Beaverdam Creek near Knox, NY | Lat 42°38'55", long 74°07'56", Albany County, Hydrologic Unit 02020005, 250 ft (76 m) downstream from bridge, 1.2 mi (1.9 km) south of Knox, and 1.7 mi (2.7 km) upstream from mouth. | 6.91 | 1963-64,<br>1966-74,<br>1976-77,<br>1979-81 | 2-21-81 | 5.44 | 651 |
| 01354200 | Sandsea Kill at Pattersonville, NY | Lat 42°53'20", long 74°04'42", Schenectady County, Hydrologic Unit 02020004, at bridge on State Highway 5S, in village of Pattersonville. | 9.60 | 1961,<br>1963-67,<br>1971-74,<br>1976-81 | 2-11-81 | 3.43 | - |
| 01354300 | Plotter Kill at Rynex Corners, NY | Lat 42°49'16", long 74°04'20", Schenectady County, Hydrologic Unit 02020004, at bridge on State Highway 159, in hamlet of Rynex Corners. | 3.70 | 1958,<br>1960-68,<br>1970-74,<br>1976-81 | 2-20-81 | 5.81 | - |

b Ice jam.
* Operated as a continuous-record gaging station.

Annual maximum discharge at crest-stage partial-record stations during water year 1981--Continued

| | | | | | Annual maximum | | |
|---|---|---|---|---|---|---|---|
| Station No. | Station name | Location | Drainage area ($mi^2$) | Period of record | Date | Gage height (feet) | Discharge ($ft^3/s$) |
| | | Hudson River basin--Continued | | | | | |
| 01355405 | Indian Kill near Glenville Center, NY | Lat 42°53'40", long 73°57'27", Schenectady County, Hydrologic Unit 02020004, 1.1 mi (1.8 km) east of Glenville Center, and 1.3 mi (2.1 km) west of East Glenville. | 2.25 | 1974-81 | 2-20-81 | 15.63 | 51 |
| 01359133 | Patroon Creek at Northern Boulevard at Albany, NY | Lat 42°40'17", long 73°45'22", Albany County, Hydrologic Unit 02020006, at culvert, 500 ft (150 m) upstream from Northern Boulevard, 700 ft (210 m) downstream from railroad bridge, 1600 ft (490 m) downstream from Tivoli Lake at Albany, and 1.3 mi (2.1 km) upstream from mouth. | 13.1 | 1979-81 | 2-24-79<br>10- 3-79<br>2-20-81 | 8.62<br>9.13<br>8.68 | 345<br>395<br>350 |
| 01361453 | Catskill Creek tributary at Franklinton, NY | Lat 42°31'35", long 74°18'33", Schoharie County, Hydrologic Unit 02020006, at culvert on town road, 0.15 mi (0.3 km) upstream from mouth, and 0.5 mi (0.8 km) northwest of Franklinton. | 3.61 | 1968-72,<br>1974-81 | 2-20-81 | 2.99 | 71 |
| 01361900 | Shingle Kill at Cairo, NY | Lat 42°18'22", long 74°00'13", Greene County, Hydrologic Unit 02020006, at bridge on town road at Cairo, southeast of State Highway 32, about 400 ft (122 m) south of State Highway 23, and 0.8 mi (1.3 km) upstream from mouth. | 13.9 | 1953,<br>1966-74,<br>1976-81 | 2-20-81 | 7.58 | 1 670 |
| 01362100 | Roeliff Jansen Kill near Hillsdale, NY | Lat 42°09'14", long 73°31'14", Columbia County, Hydrologic Unit 02020006, at bridge on county highway off State Highway 22, 1.8 mi (2.9 km) south of Hillsdale. | 27.5 | 1958-60*,<br>1963-64,<br>1968-81 | 2-11-81 | 5.18 | 992 |
| 01362197 | Bushnellsville Creek at Shandaken, NY | Lat 42°07'25", long 74°24'02", Ulster County, Hydrologic Unit 02020006, along State Highway 42, 0.4 mi (0.6 km) upstream from Esopus Creek, and 0.6 mi (1.0 km) northwest of Shandaken. | 11.4 | 1951,<br>1956,<br>1972,<br>1976-81 | 2-20-81 | 9.14 | 536 |
| 01363388 | Dry Brook at West Shokan, NY | Lat 41°58'22", long 74°17'50", Ulster County, Hydrologic Unit 02020006, at bridge on town road, 0.6 mi (1.0 km) northwest of West Shokan, and 1.2 mi (1.9 km) upstream from mouth. | 1.67 | 1978-81 | 3-20-81 | c1.86 | a110 |
| 01372200 | Wappinger Creek near Clinton Corners, NY | Lat 41°48'55", long 73°45'50", Dutchess County, Hydrologic Unit 02020008, on right downstream wingwall of highway bridge 850 ft (259 m) downstream from abandoned bridge abutment of Philadelphia, Reading, and New England Railroad, 1,900 ft (579 m) downstream from East Branch Wappinger Creek, and 1 mi (1.6 km) south of Clinton Corners. | 92.4 | 1956-76*,<br>1977-81 | 5-12-81 | 8.16 | 1,030 |

* Operated as a continuous-record gaging station.
a Approximately.
c Gage height related to downstream crest stage gage.

Annual maximum discharge at crest-stage partial-record stations during water year 1981--Continued

| Station No. | Station name | Location | Drainage area ($mi^2$) | Period of record | Annual maximum |  |  |
|---|---|---|---|---|---|---|---|
|  |  |  |  |  | Date | Gage height (feet) | Discharge ($ft^3/s$) |
|  |  | Hudson River basin--Continued |  |  |  |  |  |
| 01373690 | Woodbury Creek near Highland Mills, NY | Lat 41°22'00", long 74°06'17", Orange County, Hydrologic Unit 02020008, on left bank, 40 ft (12 m) downstream from culvert type bridge on road to Atlantic Coast Aggregate Corp. plant, 1,200 ft (366 m) downstream from bridge on State Highway 32, and 1.9 mi (3.1 km) north of Highland Mills. | 11.2 | 1966-68*,<br>1971-72,<br>1977-81 | 5-12-81 | 2.94 | - |
| 01374130 | Canopus Creek at Oscawana Corners, NY | Lat 41°22'43", long 73°52'23", Putnam County, Hydrologic Unit 02030101, at bridge on Hortun Hollow Road, 0.4 mi (0.6 km) downstream from West Branch, and 0.8 mi (1.3 km) west of Oscawana Corners. | 8.30 | 1975-81 | 2-20-81 | 3.24 | 167 |
| 01374250 | Peekskill Hollow Creek at Tompkins Corners, NY | Lat 41°23'18", long 73°48'47", Putnam County, Hydrologic Unit 02030101, at bridge on Bryant Pond Road, 0.9 mi (1.4 km) southwest of Tompkins Corners, and 1.1 mi (1.8 km) downstream from Wiccopee Brook. | 14.9 | 1975-81 | 5-16-81 | 2.80 | 233 |
| 01376420 | Saw Mill River at Elmsford, NY | Lat 41°03'19", long 73°49'16", Westchester County, Hydrologic Unit 02030101, at bridge on State Highway 119, 0.6 m (1.0 km) upstream from Rum Brook, and 0.8 mi (1.3 km) downstream from Mine Brook at Elmsford. | 15.4 | 1979-81 | 2-11-81 | 7.42 | 302 |
|  |  | Passaic River basin |  |  |  |  |  |
| 01387410 | Torne Brook at Ramapo, NY | Lat 41°08'34", long 74°09'44", Rockland County, Hydrologic Unit 02030103, 0.2 mi (0.3 km) upstream from mouth, and 0.5 mi (0.8 km) east of Ramapo. | 2.60 | 1960,<br>1962-81 | 5-12-81 | 7.10 | - |
|  |  | Delaware River basin |  |  |  |  |  |
| 01417185 | Campbell Brook tributary near Downsville, NY | Lat 42°02'41", long 74°58'37", Delaware County, Hydrologic Unit 02040102, at culvert on Campbell Brook Road, 200 ft (61 m) upstream from mouth, 2.0 mi (3 2 km) southwest of Downsville Dam, and 2.7 mi (4.3 km) southeast of Downsville. | .41 | 1975-81 | - | <1.97 | <11 |
| 01437345 | Basher Kill tributary near Westbrookville, NY | Lat 41°30'34", long 74°32'36", Sullivan County, Hydrologic Unit 02040104, at culvert on town road, 0.2 mi (0.3 km) upstream from mouth, and 1.0 mi (1.6 km) northeast of Westbrookville. | 1.07 | 1975-81 | 2-20-81 | 3.94 | 92 |

* Operated as a continuous-record gaging station.

Annual maximum discharge at crest-stage partial-record stations during water year 1981--Continued

| | | | | | Annual maximum | | |
|---|---|---|---|---|---|---|---|
| Station No. | Station name | Location | Drainage area ($mi^2$) | Period of record | Date | Gage height (feet) | Discharge ($ft^3/s$) |
| | | Streams tributary to Lake Ontario | | | | | |
| 042490673 | North Branch Grindstone Creek near Altmar, NY | Lat 43°29'31", long 76°05'41", Oswego County, Hydrologic Unit 04140102, at culvert on Hong Kong Road, 4.1 mi (6.6 km) upstream from confluence with South Branch Grindstone Creek, and 4.1 mi (6.6 km) southwest of Altmar. | 11.2 | 1976-81 | 2-24-81 | 13.51 | 435 |
| 04256040 | Mill Creek tributary near Lowville, NY | Lat 43°45'43", long 75°31'13", Lewis County, Hydrologic Unit 04150101, at culvert on West Road, 2.0 mi (3.2 km) southwest of Lowville, and 2.2 mi (3.5 km) upstream from mouth. | 1.68 | 1976-81 | 12- 3-80 | 11.32 | 156 |
| 04258700 | Deer River at Deer River. NY | Lat 43°55'49", long 75°35'31", Lewis County, Hydrologic Unit 04150101, on left bank 350 ft (107 m) upstream from bridge on State Highway 26 at Deer River, and 2 mi (3.2 km) upstream from mouth. | 98.1 | 1957-69‡,<br>1977-81 | 10-26-80<br>2-19-81 | 5.62<br>b9.38 | 6,050<br>- |
| 04260575 | Horse Creek tributary near Dexter, NY | Lat 44°04'47", long 76°03'28", Jefferson County, Hydrologic Unit 04150102, at bridge on Weaver Road, 0.3 mi (0.5 km) upstream from mouth, 1.0 mi (1.6 km) southwest of Reynolds Corners, and 5.1 mi (8.2 km) north of Dexter. | 4.59 | 1976-81 | 2-16-81 | 12.22 | 354 |
| | | Streams tributary to St. Lawrence River | | | | | |
| 04263445 | Birch Creek at Pierces Corners, NY | Lat 44°25'42", long 75°32'16", St. Lawrence County, Hydrologic Unit 04150303, at culvert on Old State Road at Pierces Corners, 4.4 mi (7.1 km) southeast of Pope Mills, and 11.1 mi (17.9 km) upstream from mouth. | 1.56 | 1977-81 | 12- 7-80 | 4.01 | 68 |
| 04264300 | Brandy Brook near Waddington, NY | Lat 44°49'42", long 75°04'32", St. Lawrence County, Hydrologic Unit 04150301, at bridge on Halfway House Road, 3.2 mi (5.1 km) southeast of Waddington, and 4.4 mi (8.2 km) upstream from mouth. | 27.0 | 1959-63‡,<br>1964-69,<br>1976-81 | 12-11-80<br>2-24-81 | 5.85<br>b8.92 | -<br>- |
| 04265100 | Elm Creek near Hermon, NY | Lat 44°26'14", long 75°12'52", St. Lawrence County, Hydrologic Unit 04150304, on left bank 100 ft (30 m) downstream from highway bridge, 2.3 mi (3.7 km) south of Hermon, and 6.8 mi (10.9 km) upstream from confluence with Tanner Creek. | 33.0 | 1958-68‡,<br>1969-81 | 12- 7-80 | 7.44 | 761 |
| 04267800 | Trout Brook at Allen Corners, NY | Lat 44°47'33", long 75°01'59", St. Lawrence County, Hydrologic Unit 04150305, at abandoned bridge off State Highway 56A, at Allen Corners, and 2 mi (3 km) southwest of Norfolk. | 56.2 | 1958-63‡<br>1964-65,<br>1967-74,<br>1976-81 | 12- 9-80<br>2-22-81 | 8.31<br>b10.21 | 958<br>- |

b Ice jam.
‡ Operated as a continuous-record gaging station.

### Annual maximum discharge at crest-stage partial-record stations during water year 1981--Continued

Streams tributary to St. Lawrence River--Continued

| | | | | | Annual maximum | | |
|---|---|---|---|---|---|---|---|
| Station No. | Station name | Location | Drainage area ($mi^2$) | Period of record | Date | Gage height (feet) | Discharge ($ft^3/s$) |
| 04268200 | Plum Brook at Grantville, NY | Lat 44°52'45", long 74°54'52", St. Lawrence County, Hydrologic Unit 04150305, at bridge on Grant Road, 0.7 mi (1.1 km) downstream from unnamed tributary, 1.1 mi (1.8 km) upstream from mouth, 1.4 mi (2.3 km) north of Grantville, and 2.3 mi (3.7 km) southwest of Massena city limits. | 37.6 | 1958-63*,<br>1964,<br>1966-68,<br>1971-81 | 12- 9-80<br>2-22-81 | 4.93<br>b5.91 | 506<br>- |
| 04268720 | Hopkinton Brook at Hopkinton, NY | Lat 44°40'59", long 74°41'58", St. Lawrence County, Hydrologic Unit 04150306, at bridge on town road, 0.4 mi (0.6 km) upstream from unnamed tributary, 0.6 mi (1.0 km) south of Hopkinton, and 2.0 mi (3.2 km) upstream from mouth. | 18.5 | 1967,<br>1969,<br>1973-74,<br>1976-81 | 12- 9-80 | 3.80 | - |
| 04268800 | West Branch St. Regis River near Parishville, NY | Lat 44°35'52", long 74°44'19", St. Lawrence County, Hydrologic Unit 04150306 at highway bridge, 4.1 mi (6.6 km) downstream from downstream from Mud Pond Outlet, 4.2 mi (6.8 km) southeast of Parishville, and 4.8 mi (7.7 km) upstream from Niagara Mohawk Power Corp. dam. | 172 | 1959-68*<br>1969,<br>1971,<br>1974,<br>1976-81 | 2-22-81<br>2-24-81 | b6.11<br>4.40 | -<br>2,250 |
| 04269050 | Allen Brook near Brasher Falls, NY | Lat 44°48'07", long 74°43'40". St. Lawrence County, Hydrologic Unit 04150306, at bridge on U.S. Highway 11, 0.8 mi (1.3 km) upstream from mouth, and 2.2 mi (3.5 km) east of Brasher Falls. | 16.0 | 1961-66*,<br>1967-74,<br>1976-81 | 12- 9-80<br>2-22-81 | 5.27<br>b5.90 | 1,270<br>- |
| 04269100 | Lawrence Brook near Moira, NY | Lat 44°50'22", long 74°35'46", Franklin County, Hydrologic Unit 04150306, at highway bridge, 2.4 mi (3.9 km) northwest of Moira, and 5.4 mi (8.7 km) upstream from mouth. | 28.0 | 1959-60*,<br>1961-81 | 12- 9-80<br>9-11-81 | b6.53<br>5.92 | -<br>- |
| 04270100 | West Branch Deer Creek at Port Covington Center, NY | Lat 44°56'49", long 74°28'49", Franklin County, Hydrologic Unit 04150307, at highway bridge, 0.8 mi (1.3 km) west of Port Covington Center, 2.1 mi (3.4 km) upstream from East Branch, and 3.1 mi (5.0 km) south of Port Covington. | 31.4 | 1962-74,<br>1976-81 | 12- 9-80<br>2-13-81 | 6.60<br>b7.27 | 1,140<br>- |
| 04270150 | East Branch Deer Creek at Port Covington Center, NY | Lat 44°56'52", long 74°27'51", Franklin County, Hydrologic Unit 04150307, at highway bridge, at Port Covington Center, 1.9 mi (3.1 km) upstream from West Branch, and 3.2 mi (5.1 km) south of Port Covington. | 23.1 | 1961-62*,<br>1963-74,<br>1976-81 | 12- 9-80<br>2-19-81 | 5.17<br>b6.88 | 582<br>- |

b Ice jam.
* Operated as a continuous-record gaging station.

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations during water year 1981--Continued

| Station No. | Station name | Location | Drainage area ($mi^2$) | Period of record | Annual maximum<br>Date | Annual maximum<br>Gage height (feet) | Annual maximum<br>Discharge ($ft^3/s$) |
|---|---|---|---|---|---|---|---|
| | | Streams tributary to St. Lawrence River--Continued | | | | | |
| 04270162 | East Branch Little Salmon River near Skerry, NY | Lat 44°47'13", long 74°22'12", Franklin County, Hydrologic Unit 04150307, at culvert on Adams Road, 100 ft (30 m) downstream from Limekiln Brook, 1.1 mi (1.8 km) northeast of Skerry, and 5.7 mi (9.0 km) upstream from mouth. | 7.11 | 1978-81 | 12- 9-80 | 5.43 | 174 |
| 04270700 | Trout River at Trout River, NY | Lat 44°59'23", long 74°17'56", Franklin County, Hydrologic Unit 04150307, at bridge on county highway, 0.2 mi (0.3 km) east of State Highway 30, at Trout River, 0.5 mi (0.8 km) upstream from international boundary, 1.5 mi (2.4 km) downstream from unnamed tributary, and 3.3 mi (5.3 km) downstream from Little Trout River. | 107 | 1970-66*,<br>1967-74,<br>1976-81 | 4- 4-60<br>3-28-61<br>8- 8-62<br>4- 4-63<br>3- 5-64<br>3-23-68<br>4- 5-69<br>4-24-70<br>4-14-71<br>5-20-76<br>3-14-77<br>4-14-78<br>3-25-79<br>11-27-79 | 6.63<br>5.41<br>5.84<br>7.25<br>5.20<br>5.61<br>5.63<br>6.28<br>5.68<br>6.07<br>7.35<br>6.68<br>6.60<br>5.28 | R3,380<br>R2,210<br>R2,600<br>R4,070<br>R2,020<br>R2,390<br>R2,410<br>R3,030<br>R2,450<br>R2,820<br>R4,190<br>R3,440<br>R3,350<br>R2,090 |
| 04273700 | Salmon River at South Plattsburgh, NY | Lat 44°38'24", long 73°29'43", Clinton County, Hydrologic Unit 02010004, on left bank, at bridge on Salmon River Road, at South Plattsburgh, 0.4 mi (0.6 km) west of State Highway 22, and 3.9 mi (6.3 km) upstream from mouth. | 61.9 | 1960-68*,<br>1969,<br>1971-81 | 2-25-81<br>9-23-81 | b5.25<br>3.93 | -<br>- |

R Revised.<br>
* Operated as a continuous-record gaging station.<br>
b Ice jam.

## Discharge measurements made at miscellaneous sites during water year 1981

| Stream | Tributary to | Location | Drainage area ($mi^2$) | Measured previously (water years) | Measurements Date | Measurements Discharge ($ft^3/s$) |
|---|---|---|---|---|---|---|
| | | Housatonic River Basin | | | | |
| 0119947960 Mill River | Swamp River | Lat 41°41'30", long 73°35'54", Dutchess County, Hydrologic Unit 01100005, along town road, 200 ft (61 m) downstream from unnamed tributary, 1.0 mi (1.6 km) upstream from mouth, and 0.7 mi (1.1 km) northwest of Dover Furnace. | | | 8-21-81 | *1.53 |
| 01199480 Mill River | Swamp River | Lat 41°41'26", long 73°35'30", Dutchess County, Hydrologic Unit 01100005, at bridge on old Dover Furnace-Dover Plains Road, 0.5 mi (0.8 km) upstream from mouth, and 0.5 mi (0.8 km) northwest of Dover Furnace. | 14.5 | 1960-66 | 8-21-81 | *1.02 |
| | | Hudson River basin | | | | |
| 01349495 Cayadutta Creek | Mohawk River | Lat 42°59'36", long 74°23'54", Fulton County, Hydrologic Unit 02020004, at bridge on town road, 2.3 mi (3.7 km) upstream from Fulton-Montgomery County line, and 0.6 mi (1.0 km) west of Johnstown City boundary line. | | 1976<br>1980 | 8- 4-81 | 12.6 |
| 01349503 Cayadutta Creek | Mohawk River | Lat 42°59'13", long 74°25'50", Fulton County, Hydrologic Unit 02020004, at bridge on State Highway 334 at Sammonsville, 0.1 mi (0.2 km) downstream from Crum Creek. | | | 8- 4-81 | 32.5 |
| 01349514 Cayadutta Creek | Mohawk River | Lat 42°58'02", long 74°25'15" Montgomery County, Hydrologic Unit 02020004, at bridge on State Highway 334, 1.6 mi (2.6 km) southeast of Sammonsville. | | 1971<br>1976<br>1980 | 8- 4-81 | 42.0 |
| 01349520 Cayadutta Creek | Mohawk River | Lat 42°57'13", long 74°22'52", Montgomery County, Hydrologic Unit 02020004, at bridge on State Highway 5, at Fonda. | | 1966-67<br>1971<br>1975-76 | 8- 4-81 | 34.3 |
| 01360518 Green Brook | Kinderhook Creek | Lat 42°28'36", long 73°33'26", Columbia County, Hydrologic Unit 02020006, 3,000 ft (914 m) upstream from State Highway 66 bridge at Riders Mills. | | | 8-14-81 | *.52 |
| 01360520 Green Brook | Kinderhook Creek | Lat 42°28'50", long 73°34'01", Columbia County, Hydrologic Unit 02020006, at bridge on State Highway 66, 200 ft (61 m) upstream from mouth, at Riders Mills, and 1.1 mi (1.8 km) northwest of Malden Bridge. | 4.65 | 1962-65<br>1973-74 | 8-14-81 | *.50 |
| 01360529 Trout Brook | Kinderhook Creek | Lat 42°26'37", long 73°34'55", Columbia County, Hydrologic Unit 02020006, 850 ft (259 m) upstream from town road bridge, and 1.1 mi (1.8 km) west of Old Chatham. | | | 8-14-81 | *.32 |
| 01360530 Trout Brook | Kinderhook Creek | Lat 42°26'38", long 73°35'05", Columbia County, Hydrologic Unit 02020006, at bridge on Shaker Museum Road, 0.35 mi (0.56 km) upstream from mouth, and 1.2 mi (1.9 km) west of Old Chatham. | 4.87 | 1962-65<br>1973-74 | 8-14-81 | *.27 |

* Base flow.

Discharge measurements made at miscellaneous sites during water year 1981--Continued

| Stream | Tributary to | Location | Drainage area ($mi^2$) | Measured previously (water years) | Measurements | |
|---|---|---|---|---|---|---|
| | | | | | Date | Discharge ($ft^3/s$) |
| | | Hudson River basin--Continued | | | | |
| 01360570 Indian Creek | Kinderhook Creek | Lat 42°21'11", long 73°34'34", Columbia County, Hydrologic Unit 02020006, at bridge on relocated State Highway 203, 0.4 mi (0.6 km) upstream from Punsit Creek, and 1.3 mi (2.1 km) east of intersection of State Highways 203 and 66 in Chatham. | 12.4 | 1962-66<br>1972-74 | 8-14-81<br>8-21-81 | *1.36<br>*1.42 |
| 01360580 Punsit Creek | Kline Kill | Lat 42°20'50", long 73°34'31", Columbia County, Hydrologic Unit 02020006, at bridge on Moorhouse Corner Road, 0.15 mi (0.24 km) upstream from Indian Creek, 0.25 mi (0.40 km) southwest of Moorhouse Corner, and 1.5 mi (2.4 km) southeast of intersection of State Highways 203 and 66 in Chatham. | 16.0 | 1962-66<br>1972-74 | 8-14-81<br>8-21-81 | *1.48<br>*.89 |
| 01360583 Kline Kill | Kinderhook Creek | Lat 42°20'45", long 73°35'13", Columbia County, Hydrologic Unit 02020006, 0.5 mi (0.8 km) upstream from bridge at Arnolds Mill and 1.3 mi (2.1 km) southeast of Chatham. | | | 8-21-81 | *1.71 |
| 01360585 Kline Kill | Kinderhook Creek | Lat 42°20'29", long 73°35'48". Columbia County, Hydrologic Unit 02020006, at bridge on town road at Arnolds Mill, 1.5 mi (2.4 km) south of Chatham. | | | 8-14-81<br>8-21-81 | *2.59<br>*1.89 |
| 0136216797 Fall Kill | Roeliff Jansen Kill | Lat 42°41'13", long 73°43'50", Columbia County, Hydrologic Unit 02020006, 0.3 mi (0.5 km) upstream from County Highway 2, 200 ft (61 m) downstream from unnamed tributary, and 4 mi (6.4 km) southeast of Elisaville. | | | 8-21-81 | *.17 |
| 01362168 Fall Kill | Roeliff Jansen Kill | Lat 42°00'56" long 73°43'59", Columbia County, Hydrologic Unit 02020006, at bridge on County Highway 2, 0.3 mi (0.5 km) upstream from mouth, and 4 mi (6.4 km) southeast of Elisaville. | 5.02 | 1962<br>1964-66<br>1973-74 | 8-21-81 | *.08 |
| 01369000 Pochuck Creek | Wallkill River | Lat 41°16'32", long 74°28'18", Orange County, Hydrologic Unit 02020007, on right bank 75 ft (23 m) downstream from bridge on Newport Bridge Road at Newport, 1.5 mi (2.4 km) south of Pine Island, 3.2 mi (5.1 km) west of Edenville, and 4.1 mi (6.6 km) upstream from mouth. | 98.0 | 1938-77‡ | 10-24-80 | *8.90 |
| 01372298 Little Wappinger Creek | Wappinger Creek | Lat 41°48'54", long 73°48'05", Dutchess County, Hydrologic Unit 02020008, along Clinton Hollow Road, 0.7 mi (1.1 km) upstream from Salt Point Turnpike at Salt Point. | | | 8-20-81 | *1.09 |
| 01372300 Little Wappinger Creek | Wappinger Creek | Lat 41°48'20", long 73°47'38", Dutchess County, Hydrologic Unit 02020008, on right bank 200 ft (61 m) downstream from abandoned railroad bridge abutment at Salt Point, and 0.6 mi (1.0 km) upstream from Wappinger Creek. | 32.9 | 1956-75‡ | 8-20-81 | *1.80 |

* Base flow.
‡ Operated as a continuous-record gaging station.

Discharge measurements made at miscellaneous sites during water year 1981--Continued

| Stream | Tributary to | Location | Drainage area ($mi^2$) | Measured previously (water years) | Measurements Date | Measurements Discharge ($ft^3/s$) |
|---|---|---|---|---|---|---|
| | | Hudson River basin--Continued | | | | |
| 01372687 Fishkill Creek | Hudson River | Lat 41°35'18", long 73°47'17", Dutchess County, Hydrologic Unit 02020008, at bridge on Carpenter Road, 1.2 mi (1.9 km) northeast of Hopewell Junction. | | | 8-20-81 | *5.78 |
| 01372800 Fishkill Creek | Hudson River | Lat 41°34'18", long 73°48'28", Dutchess County, Hydrologic Unit 02020008, on right bank 400 ft (122 m) upstream from bridge on State Highway 376, 500 ft (152 m) upstream from small tributary, 0.6 mi (1.0 km) south of State Highway 82, at Hopewell Junction. | 57.3 | 1957-75‡ | 10-24-80<br>8-20-81 | *6.23<br>*6.39 |
| 0137286590 Jackson Creek | Sprout Creek | Lat 41°38'33", long 73°47'31", Dutchess County, Hydrologic Unit 02020008, at bridge on Noxon Road, 0.2 mi (0.3 km) upstream from Arthursburg Road, and 1.2 mi (1.9 km) east of Noxon. | | | 8-20-81 | *.39 |
| 01372866 Jackson Creek | Sprout Creek | Lat 41°38'27", long 73°47'37", Dutchess County, Hydrologic Unit 02020008, at bridge on Arthursburg Road, 1.1 mi (1.8 km) east of Noxon, about 1.75 mi (2.82 km) upstream from mouth. | 11.4 | 1960-62<br>1966 | 8-20-81 | *.21 |
| | | Delaware River basin | | | | |
| 01421200 Cadosia Creek | East Branch Delaware River | Lat 41°58'03", long 75°15'51", Delaware County, Hydrologic Unit 02040102, at bridge on State Highway 236, 0.3 mi (0.5 km) upstream from mouth, at Cadosia. | 17.7 | 1949-50<br>1955<br>1957-71<br>1973-80 | 11-14-80<br>5- 5-81<br>6- 5-81<br>6-30-81<br>7-16-81<br>8-25-81<br>9-30-81 | 10.2<br>37.2<br>13.0<br>*8.47<br>*2.72<br>*2.14<br>*4.84 |
| 01425665 Oquaga Creek | West Branch Delaware River | Lat 42°11'06", long 75°25'27", Broome County, Hydrologic Unit 02040101, at bridge on North Sanford Road, 0.3 mi (.5 km) upstream from small tributary, 0.5 mi (0.8 km) west of Arctic, 1.3 mi (2.1 km) upstream from station 01425675 Oquaga Creek near North Sanford, and 2.6 mi (4.2 km) northeast of North Sanford. | 1.15 | 1969-78<br>1980 | 10-15-80<br>3-16-81<br>4- 8-81<br>5- 5-81<br>6- 2-81<br>7- 1-81<br>7-30-81<br>8-25-81 | *.07<br>*1.17<br>.86<br>1.60<br>*.31<br>*.14<br>.10<br>*.01 |
| 01425670 Oquaga Creek Tributary | Oquaga Creek | Lat 42°10'56", long 75°25'16", Broome County, Hydrologic Unit 02040101, 0.2 mi (0.3 km) upstream from mouth, 0.4 mi (0.6 km) southwest of Arctic, 0.4 mi (0.6 km) downstream from bridge on East Afton Road, and 2.5 mi (4.0 km) northwest of North Sanford. | 2.37 | 1969-78<br>1980 | 10-15-80<br>3-16-81<br>4- 8-81<br>5- 5-81<br>6- 2-81<br>7- 1-81<br>7-30-81<br>8-25-81 | *.18<br>*2.23<br>2.30<br>3.69<br>*1.04<br>*.54<br>*.31<br>*.19 |
| 01426000 Oquaga Creek | West Branch Delaware River | Lat 42°03'35", long 75°25'40", Broome County, Hydrologic Unit 02040101 on left bank, 200 ft (61 m) upstream from washed-out dam at rear of Delaware Mills, 400 ft (120 m) upstream from Mill Street Bridge in Deposit, and 0.3 mi (0.5 km) upstream from mouth. | 66.4 | 1941-73‡<br>1975-76<br>1979-80 | 11-14-80<br>5- 5-81<br>6- 5-81<br>6-30-81<br>7-16-81<br>8-25-81<br>9-30-81 | 46.9<br>121<br>43.1<br>*12.9<br>*5.12<br>*3.05<br>*6.73 |

* Base flow.

‡ Operated as a continuous-record gaging station.

Discharge measurements made at miscellaneous sites during water year 1981--Continued

| Stream | Tributary to | Location | Drainage area ($mi^2$) | Measured previously (water years) | Measurements | |
|---|---|---|---|---|---|---|
| | | | | | Date | Discharge ($ft^3/s$) |
| | | Delaware River basin--Continued | | | | |
| 01428000 Tenmile River | Delaware River | Lat 41°33'51", long 75°00'56", Sullivan County, Hydrologic Unit 02040101, on left bank 0.5 mi (0.8 km) downstream from East Branch Tenmile River, 0.8 mi (1.3 km) upstream from mouth, and 0.6 mi (1.0 km) northeast of Tusten. | 45.0 | 1946-73‡<br>1978-80 | 5- 5-81<br>7-15-81 | 40.8<br>*4.20 |
| 01438000 Neversink River | Delaware River | Lat 41°21'40", long 74°41'07", Orange County, Hydrologic Unit 02040104, at Tristates Bridge on East Main Street (U.S. Highway 6), in Port Jervis 450 ft (137 m) upstream from Clove Brook, and 0.6 mi (1.0 km) upstream from mouth. | 346 | 1902-03<br>1943<br>1945<br>1960-62<br>1965-80 | 11-13-80<br>6-18-81 | 106<br>219 |
| | | Streams tributary to St. Lawrence River | | | | |
| 04269043 Deer River | St. Regis River | Lat 44°47'57", long 74°40'24", St. Lawrence County, Hydrologic Unit 04150306, on right bank, 0.4 mi (0.6 km) upstream from abandoned railroad bridge, 0.5 mi (0.8 km) upstream from dam at Kraft Co. Plant at North Lawrence, and 1.7 mi (2.7 km) downstream from Kingston Brook. | 88.2 | 1973-79‡<br>1980 | 1-26-81<br>4- 2-81 | 49.8<br>491 |

* Base flow.

‡ Operated as a continuous-record gaging station.

# ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

Water-quality partial-record stations are particular sites where chemical-quality, biological and or sediment data are collected systematically over a period of years for use in hydrologic analyses. The data are collected usually less than quarterly.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

### HUDSON RIVER BASIN

01359802- HUDSON RIVER BELOW CASTLETON-ON-HUDSON NY (LAT 42 31 07 LONG 073 46 00)

| DATE | TIME | PCB, TOTAL (UG/L) | PCB, TOTAL IN BOTTOM MATERIAL (UG/KG) | SEDIMENT, SUSPENDED (MG/L) |
|---|---|---|---|---|
| JUL , 1981 | | | | |
| 14... | 1000 | .10 | -- | 5 |
| 21... | 1015 | <.10 | -- | 11 |
| AUG | | | | |
| 03... | 1000 | .10 | -- | 18 |
| 18... | 1130 | <.10 | -- | 9 |
| SEP | | | | |
| 03... | 1045 | .10 | -- | 9 |

01361450 - HUDSON RIVER AT CATSKILL NY (LAT 42 12 36 LONG 073 51 12)

| DATE | TIME | PCB, TOTAL (UG/L) | PCB, TOTAL IN BOTTOM MATERIAL (UG/KG) | SEDIMENT, SUSPENDED (MG/L) |
|---|---|---|---|---|
| JUL , 1981 | | | | |
| 14... | 1330 | .10 | -- | 10 |
| 21... | 1300 | <.10 | -- | 15 |
| AUG | | | | |
| 03... | 1145 | <.10 | -- | 16 |
| 18... | 1245 | <.10 | -- | 13 |
| SEP | | | | |
| 03... | 1315 | .10 | -- | 12 |

01372035 - HUDSON RIVER AT STAATSBURG NY (LAT 41 50 18 LONG 073 57 00)

| DATE | TIME | PCB, TOTAL (UG/L) | PCB, TOTAL IN BOTTOM MATERIAL (UG/KG) | SEDIMENT, SUSPENDED (MG/L) |
|---|---|---|---|---|
| JUL , 1981 | | | | |
| 15... | 1015 | <.10 | -- | 11 |
| 22... | 1015 | <.10 | 20 | 20 |
| AUG | | | | |
| 04... | 1100 | .10 | -- | 34 |
| 19... | 1215 | <.10 | -- | 20 |
| SEP | | | | |
| 04... | 0830 | .10 | -- | 10 |

01372059 - HUDSON R AT CLINTON POINT NEAR NEW HAMBURG NY (LAT 41 37 27 LONG 073 56 55)

| DATE | TIME | PCB, TOTAL (UG/L) | PCB, TOTAL IN BOTTOM MATERIAL (UG/KG) | SEDIMENT, SUSPENDED (MG/L) |
|---|---|---|---|---|
| JUL , 1981 | | | | |
| 15... | 0830 | .10 | -- | 13 |
| 22... | 0815 | .10 | -- | 14 |
| AUG | | | | |
| 04... | 0930 | .10 | 50 | 20 |
| 19... | 1045 | <.10 | -- | 13 |
| SEP | | | | |
| 04... | 0945 | .10 | -- | 11 |

## ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

Samples are collected at sites other than gaging stations and partial-record stations to give better areal coverage in a river basin. Such sites are referred to as miscellaneous sites.

### WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | TIME | SPECIFIC CONDUCTANCE (UMHOS) | PH (UNITS) | NITROGEN, NITRATE TOTAL (MG/L AS N) | NITROGEN, NITRATE DISSOLVED (MG/L AS N) | NITROGEN, NITRITE TOTAL (MG/L AS N) | NITROGEN, NITRITE DISSOLVED (MG/L AS N) | NITROGEN, NO2+NO3 TOTAL (MG/L AS N) | NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) | NITROGEN, AMMONIA TOTAL (MG/L AS N) | NITRO GEN, AMMONIA DISSOLVED (MG/L AS N) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| HUDSON RIVER BASIN | | | | | | | | | | | |
| 01376310 - SAW MILL RIVER AT CHAPPAQUA NY (LAT 41 09 50 LONG 073 46 41) | | | | | | | | | | | |
| MAY , 1981<br>12... | 0845 | 160 | 6.9 | .53 | .54 | .020 | .010 | .55 | .55 | .070 | .070 |
| 01376320 - SAW MILL RIVER AT PLEASANTVILLE NY (LAT 41 07 55 LONG 073 47 47) | | | | | | | | | | | |
| FEB , 1981<br>10... | 1620 | 410 | 7.6 | 1.6 | 1.60 | .030 | .020 | 1.6 | 1.6 | .040 | .120 |
| 01376440 - SAW MILL RIVER AT WORTHINGTON NY (LAT 41 01 51 LONG 073 50 37) | | | | | | | | | | | |
| AUG , 1981<br>12... | 1345 | 420 | 7.1 | .63 | .62 | .030 | .030 | .66 | .65 | .020 | .030 |
| 01376450 - SAW MILL RIVER AT MOUNT HOPE NY (LAT 40 59 09 LONG 073 51 54) | | | | | | | | | | | |
| MAY , 1981<br>11... | 1400 | 465 | 7.4 | .51 | .52 | .030 | .030 | .54 | .55 | .100 | .120 |
| 01376460 - SAW MILL RIVER AT GREY OAKS AT YONKERS NY (LAT 40 57 58 LONG 073 52 19) | | | | | | | | | | | |
| FEB , 1981<br>10... | 1400 | 760 | 7.6 | 1.3 | 1.30 | .040 | .040 | 1.3 | 1.3 | .080 | .070 |
| AUG<br>12... | 1145 | 570 | 7.1 | .66 | .66 | .020 | .020 | .68 | .68 | .060 | .080 |
| 01376495 - SAW MILL RIVER AT ASHBURTON AVE AT YONKERS NY (LAT 40 56 18 LONG 073 53 05) | | | | | | | | | | | |
| MAY , 1981<br>11... | 1100 | 410 | 7.4 | .58 | .48 | .060 | .050 | .64 | .53 | .310 | .040 |
| 01376503 - SAW MILL RIVER AT ELM ST AT YONKERS NY (LAT 40 56 03 LONG 073 53 00) | | | | | | | | | | | |
| FEB , 1981<br>10... | 1200 | 700 | 7.4 | 1.2 | 1.20 | .050 | .050 | 1.2 | 1.2 | .450 | .440 |

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | NITROGEN, ORGANIC TOTAL (MG/L AS N) | NITROGEN, ORGANIC DISSOLVED (MG/L AS N) | NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) | NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) | NITROGEN, TOTAL (MG/L AS N) | NITROGEN DISSOLVED (MG/L AS N) | PHOSPHORUS, TOTAL (MG/L AS P) | PHOSPHORUS, DISSOLVED (MG/L AS P) | PHOSPHORUS, ORTHO, TOTAL (MG/L AS P) | PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) | ARSENIC TOTAL (UG/L AS AS) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| HUDSON RIVER BASIN--Continued | | | | | | | | | | | |
| 01376310 - SAW MILL RIVER AT CHAPPAQUA NY (LAT 41 09 50 LONG 073 46 41) | | | | | | | | | | | |
| MAY , 1981<br>12... | .68 | .61 | .75 | .68 | 1.3 | 1.2 | .120 | .020 | .020 | .020 | 0 |
| 01376320 - SAW MILL RIVER AT PLEASANTVILLE NY (LAT 41 07 55 LONG 073 47 47) | | | | | | | | | | | |
| FEB , 1981<br>10... | .51 | .38 | .55 | .50 | 2.2 | 2.1 | .100 | .060 | .020 | .020 | 0 |
| 01376440 - SAW MILL RIVER AT WORTHINGTON NY (LAT 41 01 51 LONG 073 50 37) | | | | | | | | | | | |
| AUG , 1981<br>12... | .42 | .41 | .44 | .44 | 1.1 | 1.1 | .110 | .040 | .060 | .040 | -- |
| 01376450 - SAW MILL RIVER AT MOUNT HOPE NY (LAT 40 59 09 LONG 073 51 54) | | | | | | | | | | | |
| MAY , 1981<br>11... | .69 | .37 | .79 | .49 | 1.3 | 1.0 | .070 | .050 | .020 | .030 | 0 |
| 01376460 - SAW MILL RIVER AT GREY OAKS AT YONKERS NY (LAT 40 57 58 LONG 073 52 19) | | | | | | | | | | | |
| FEB , 1981<br>10... | .52 | .56 | .60 | .63 | 1.9 | 1.9 | .150 | .090 | .050 | .040 | 0 |
| AUG<br>12... | .72 | .30 | .78 | .38 | 1.5 | 1.1 | .140 | .050 | .090 | .060 | -- |
| 01376495 - SAW MILL RIVER AT ASHBURTON AVE AT YONKERS NY (LAT 40 56 18 LONG 073 53 05) | | | | | | | | | | | |
| MAY , 1981<br>11... | 1.4 | .60 | 1.70 | .64 | 2.3 | 1.2 | .400 | .070 | .170 | .050 | 0 |
| 01376503 - SAW MILL RIVER AT ELM ST AT YONKERS NY (LAT 40 56 03 LONG 073 53 00) | | | | | | | | | | | |
| FEB , 1981<br>10... | 1.4 | .96 | 1.80 | 1.4 | 3.0 | 2.6 | .220 | .220 | .120 | .100 | 1 |

## ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | ARSENIC DIS-SOLVED (UG/L AS AS) | CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) | CADMIUM DIS-SOLVED (UG/L AS CD) | CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) | CHRO-MIUM, DIS-SOLVED (UG/L AS CR) | COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) | COBALT, DIS-SOLVED (UG/L AS CO) | COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) | COPPER, DIS-SOLVED (UG/L AS CU) | IRON, TOTAL RECOV-ERABLE (UG/L AS FE) | IRON, DIS-SOLVED (UG/L AS FE) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| HUDSON RIVER BASIN--Continued | | | | | | | | | | | |
| 01376310 - SAW MILL RIVER AT CHAPPAQUA NY (LAT 41 09 50 LONG 073 46 41) | | | | | | | | | | | |
| MAY , 1981<br>12... | 0 | 1 | <1 | 10 | 10 | — | — | 5 | 4 | 1100 | 210 |
| 01376320 - SAW MILL RIVER AT PLEASANTVILLE NY (LAT 41 07 55 LONG 073 47 47) | | | | | | | | | | | |
| FEB , 1981<br>10... | 0 | 0 | <1 | 20 | 10 | — | — | 13 | 2 | 1600 | 110 |
| 01376440 - SAW MILL RIVER AT WORTHINGTON NY (LAT 41 01 51 LONG 073 50 37) | | | | | | | | | | | |
| AUG , 1981<br>12... | — | 1 | 2 | 30 | 20 | <1 | 2 | 8 | 3 | 610 | 100 |
| 01376450 - SAW MILL RIVER AT MOUNT HOPE NY (LAT 40 59 09 LONG 073 51 58) | | | | | | | | | | | |
| MAY , 1981<br>11... | 0 | 1 | <1 | 10 | <10 | — | — | 4 | 3 | 790 | 90 |
| 01376460 - SAW MILL RIVER AT GREY OAKS AT YONKERS NY (LAT 40 57 58 LONG 073 52 19) | | | | | | | | | | | |
| FEB , 1981<br>10... | 0 | 1 | <1 | 20 | 10 | — | — | 12 | 6 | 1350 | 70 |
| AUG<br>12... | — | 2 | <1 | 10 | 10 | <1 | 4 | 7 | 6 | 950 | 50 |
| 01376495 - SAW MILL RIVER AT ASHBURTON AVE AT YONKERS NY (LAT 40 56 18 LONG 073 53 05) | | | | | | | | | | | |
| MAY , 1981<br>11... | 1 | 2 | <1 | 30 | 10 | — | — | 95 | 18 | 2400 | 230 |
| 01376503 - SAW MILL RIVER AT ELM ST AT YONKERS NY (LAT 40 56 03 LONG 073 53 00) | | | | | | | | | | | |
| FEB , 1981<br>10... | 0 | 1 | <1 | 20 | 10 | — | — | 34 | 9 | 1400 | 60 |

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) | LEAD, DIS- SOLVED (UG/L AS PB) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) | MERCURY DIS- SOLVED (UG/L AS HG) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) | NICKEL, DIS- SOLVED (UG/L AS NI) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) | ZINC, DIS- SOLVED (UG/L AS ZN) |
|---|---|---|---|---|---|---|---|---|---|---|
| HUDSON RIVER BASIN--Continued | | | | | | | | | | |
| 01376310 - SAW MILL RIVER AT CHAPPAQUA NY (LAT 41 09 50 LONG 073 46 41) | | | | | | | | | | |
| MAY , 1981<br>12... | 4 | 1 | 130 | 70 | <.1 | -- | -- | -- | 10 | 4 |
| 01376320 - SAW MILL RIVER AT PLEASANTVILLE NY (LAT 41 07 55 LONG 073 47 47) | | | | | | | | | | |
| FEB , 1981<br>10... | 13 | 3 | 120 | 80 | .1 | .1 | -- | -- | 40 | <4 |
| 01376440 - SAW MILL RIVER AT WORTHINGTON NY (LAT 41 01 51 LONG 073 50 37) | | | | | | | | | | |
| AUG , 1981<br>12... | 12 | 1 | 220 | 60 | -- | -- | 2 | 2 | 30 | <4 |
| 01376450 - SAW MILL RIVER AT MOUNT HOPE NY (LAT 40 59 09 LONG 073 51 54) | | | | | | | | | | |
| MAY , 1981<br>11... | 6 | 0 | 200 | 140 | <.1 | -- | -- | -- | 10 | 5 |
| 01376460 - SAW MILL RIVER AT GREY OAKS AT YONKERS NY (LAT 40 57 58 LONG 073 52 19) | | | | | | | | | | |
| FEB , 1981<br>10... | 22 | 3 | 80 | 80 | .1 | <.1 | -- | -- | 30 | 10 |
| AUG<br>12... | 19 | 2 | 170 | 50 | <.1 | -- | 4 | 8 | 40 | <4 |
| 01376495 - SAW MILL RIVER AT ASHBURTON AVE AT YONKERS NY (LAT 40 56 18 LONG 073 53 05) | | | | | | | | | | |
| MAY , 1981<br>11... | 91 | 14 | 380 | 180 | <.1 | -- | -- | -- | 110 | 30 |
| 01376503 - SAW MILL RIVER AT ELM ST AT YONKERS NY (LAT 40 56 03 LONG 073 53 00) | | | | | | | | | | |
| FEB , 1981<br>10... | 27 | 6 | 130 | 80 | .1 | .1 | -- | -- | 130 | 20 |

| DATE | TIME | SPECIFIC CONDUCTANCE (UMHOS) | PH (UNITS) | PHENOLS (UG/L) |
|---|---|---|---|---|
| HUDSON RIVER BASIN--Continued | | | | |
| 01376310 - SAW MILL RIVER AT CHAPPAQUA NY (LAT 41 09 50 LONG 073 46 41) | | | | |
| SEP , 1981 | | | | |
| 02... | 0945 | 265 | 6.9 | <1 |
| 01376390 - SAW MILL RIVER AT HAWTHORNE NY (LAT 41 06 29 LONG 073 48 11) | | | | |
| SEP , 1981 | | | | |
| 02... | 0815 | 580 | 7.1 | <1 |
| 01376410 - SAW MILL RIVER AT EASTVIEW NY (LAT 41 04 48 LONG 073 49 40) | | | | |
| SEP , 1981 | | | | |
| 01... | 1645 | 420 | 7.5 | <1 |
| 01376420 - SAW MILL RIVER AT ELMSFORD NY (LAT 41 03 19 LONG 073 49 16) | | | | |
| SEP , 1981 | | | | |
| 01... | 1630 | 330 | 7.0 | 2 |
| 01376440 - SAW MILL RIVER AT WORTHINGTON NY (LAT 41 01 51 LONG 073 50 37) | | | | |
| SEP , 1981 | | | | |
| 01... | 1600 | 480 | 7.4 | <1 |
| 01376443 - SAW MILL RIVER AT WOODLANDS NY (LAT 41 01 23 LONG 073 50 44) | | | | |
| SEP , 1981 | | | | |
| 01... | 1530 | 500 | 7.3 | <1 |
| 01376450 - SAW MILL RIVER AT MOUNT HOPE NY (LAT 40 59 09 LONG 073 51 54) | | | | |
| SEP , 1981 | | | | |
| 01... | 1445 | 490 | 6.9 | <1 |
| 01376460 - SAW MILL RIVER AT GREY OAKS AT YONKERS NY (LAT 40 57 58 LONG 073 52 19) | | | | |
| SEP , 1981 | | | | |
| 01... | 1415 | 460 | 6.7 | <1 |
| 01376495 - SAW MILL RIVER AT ASHBURTON AVE AT YONKERS NY (LAT 40 56 18 LONG 073 53 05) | | | | |
| SEP , 1981 | | | | |
| 06... | 1340 | 160 | 6.7 | 4 |
| 01376503 - SAW MILL RIVER AT ELM ST AT YONKERS NY (LAT 40 56 03 LONG 073 53 00) | | | | |
| SEP , 1981 | | | | |
| 02... | 1310 | 145 | 6.6 | 1 |

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | TIME | CARBON, ORGANIC TOTAL (MG/L AS C) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) | CARBON, INOR- GANIC, TOTAL (MG/L AS C) | CARBON, INOR- GANIC, DIS- SOLVED (MG/L AS C) | BROM- OFORM TOTAL (UG/L) | BENZENE TOTAL (UG/L) | CARBON- TETRA- CHLO- RIDE TOTAL (UG/L) | CHLORO- BENZENE TOTAL (UG/L) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) | CHLORO- ETHANE TOTAL (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| HUDSON RIVER BASIN--Continued | | | | | | | | | | | |
| 01376310 - SAW MILL RIVER AT CHAPPAQUA NY (LAT 41 09 50 LONG 073 46 41) | | | | | | | | | | | |
| MAY , 1981<br>12... | 0845 | 8.6 | 7.1 | 14 | 9.9 | -- | -- | -- | -- | -- | -- |
| 01376320 - SAW MILL RIVER AT PLEASANTVILLE NY (LAT 41 07 55 LONG 073 47 47) | | | | | | | | | | | |
| FEB , 1981<br>10... | 1620 | 6.6 | 6.0 | 21 | 18 | .00 | .00 | .00 | .00 | .00 | .00 |
| 01376440 - SAW MILL RIVER AT WORTHINGTON NY (LAT 41 01 51 LONG 073 50 37) | | | | | | | | | | | |
| AUG , 1981<br>12... | 1345 | 7.4 | 4.3 | 37 | 34 | -- | -- | -- | -- | -- | -- |
| 01376450 - SAW MILL RIVER AT MOUNT HOPE NY (LAT 40 59 09 LONG 073 51 54) | | | | | | | | | | | |
| MAY , 1981<br>11... | 1400 | 4.5 | 2.7 | 34 | 28 | -- | -- | -- | -- | -- | -- |
| 01376460 - SAW MILL RIVER AT GREY OAKS AT YONKERS NY (LAT 40 57 58 LONG 073 52 19) | | | | | | | | | | | |
| FEB , 1981<br>10... | 1400 | 6.3 | 4.7 | 18 | 18 | .00 | .00 | .00 | .00 | .00 | .00 |
| AUG<br>12... | 1145 | 5.1 | 1.6 | 34 | 39 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| 01376495 - SAW MILL RIVER AT ASHBURTON AVE AT YONKERS NY (LAT 40 56 18 LONG 073 53 05) | | | | | | | | | | | |
| MAY , 1981<br>11... | 1100 | -- | 19 | -- | 26 | -- | -- | -- | -- | -- | -- |
| AUG<br>12... | 0915 | -- | -- | -- | -- | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| 01376503 - SAW MILL RIVER AT ELM ST AT YONKERS NY (LAT 40 56 03 LONG 073 53 00) | | | | | | | | | | | |
| FEB , 1981<br>10... | 1200 | 11 | 4.2 | 22 | 17 | .00 | .00 | .00 | .00 | .00 | .00 |

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | CHLOROETHYLENE TOTAL (UG/L) | CHLOROOFORM TOTAL (UG/L) | DICHLOROBROMOMETHANE TOTAL (UG/L) | DICHLORODIFLUOROMETHANE TOTAL (UG/L) | ETHYLBENZENE TOTAL (UG/L) | METHYLBROMIDE TOTAL (UG/L) | METHYLENE CHLORIDE TOTAL (UG/L) | TETRACHLOROETHYLENE TOTAL (UG/L) | TOLUENE TOTAL (UG/L) | TRICHLOROFLOUROMETHANE TOTAL (UG/L) | TRICHLOROTHYLENE TOTAL (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| HUDSON RIVER BASIN--Continued | | | | | | | | | | | |
| 01376320 - SAW MILL RIVER AT PLEASANTVILLE NY (LAT 41 07 55 LONG 073 47 47) | | | | | | | | | | | |
| FEB , 1981<br>10... | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 2.0 | .00 | .00 | .00 |
| 01376460 - SAW MILL RIVER AT GREY OAKS AT YONKERS NY (LAT 40 57 58 LONG 073 52 19) | | | | | | | | | | | |
| FEB , 1981<br>10... | 2.0 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 10 |
| AUG<br>12... | 8.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 20 |
| 01376495 - SAW MILL RIVER AT ASHBURTON AVE AT YONKERS NY (LAT 40 56 18 LONG 073 53 05) | | | | | | | | | | | |
| AUG<br>12... | 8.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| 01376503 - SAW MILL RIVER AT ELM ST AT YONKERS NY (LAT 40 56 03 LONG 073 53 00) | | | | | | | | | | | |
| FEB , 1981<br>10... | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 2.0 |

| DATE | VINYL CHLORIDE TOTAL (UG/L) | 2-CHLOROETHYLVINYLETHER TOTAL (UG/L) | 1,1-DICHLOROETHANE TOTAL (UG/L) | 1,1-DICHLOROETHYLENE TOTAL (UG/L) | 1,2-DICHLOROETHANE TOTAL (UG/L) | 1,2-DICHLOROPROPANE TOTAL (UG/L) | 1,3-DICHLOROPROPANE TOTAL (UG/L) | 1,1,1-TRICHLOROETHANE TOTAL (UG/L) | 1,1,2,2 TETRACHLOROETHANE TOTAL (UG/L) | 1,1,2-TRICHLOROETHANE TOTAL (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| 01376320 - SAW MILL RIVER AT PLEASANTVILLE NY (LAT 41 07 55 LONG 073 47 47) | | | | | | | | | | |
| FEB , 1981<br>10... | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 01376460 - SAW MILL RIVER AT GREY OAKS AT YONKERS NY (LAT 40 57 58 LONG 073 52 19) | | | | | | | | | | |
| FEB , 1981<br>10... | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| AUG<br>12... | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| 01376495 - SAW MILL RIVER AT ASHBURTON AVE AT YONKERS NY (LAT 40 56 18 LONG 073 53 05) | | | | | | | | | | |
| AUG<br>12... | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 30 | <1.0 | <1.0 |
| 01376503 - SAW MILL RIVER AT ELM ST AT YONKERS NY (LAT 40 56 03 LONG 073 53 00) | | | | | | | | | | |
| FEB , 1981<br>10... | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |

## ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

### HUDSON RIVER BASIN--Continued

### 01376310 - SAW MILL RIVER AT CHAPPAQUA NY (LAT 41 09 50 LONG 073 46 41)

| DATE | BOTTOM MATERIAL SIEVE DIAMETER RANGE (MM) | NITROGEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) | NITROGEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) | NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) | NITROGEN,TOT IN BOTTOM MATERIAL (MG/KG AS N) | PHOSPHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) | ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) | CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) | CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) | COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) | COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU) | IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY , 1981 | | | | | | | | | | | | |
| 12... | <2 | 5.4 | 6.1 | 1950 | 1960 | 320 | 0 | 0 | 10 | -- | 6 | 7100 |
| 12... | 1-2 | 6.6 | 5.1 | 4590 | 4600 | 490 | 0 | 0 | 20 | -- | -- | 15000 |
| 12... | .5-1 | 1.9 | 2.8 | 517 | 519 | 260 | 0 | 0 | 10 | -- | 15 | 5000 |
| 12... | .25-.50 | 1.7 | 2.5 | 365 | 367 | 320 | 0 | 0 | <10 | -- | 5 | 3900 |
| 12... | .125-.25 | 11 | 19 | 9730 | 9740 | 830 | 0 | 0 | 40 | -- | 26 | 14000 |
| 12... | .063-.125 | 4.6 | 6.8 | 1070 | 1070 | 960 | 0 | 0 | 100 | -- | 110 | 30000 |
| 12... | <.063 | 6.4 | 9.5 | 7740 | 7750 | 1100 | 0 | 3 | 60 | -- | 39 | 25000 |
| AUG | | | | | | | | | | | | |
| 12... | <2 | 3.3 | 5.5 | 580 | 583 | 87 | -- | -- | -- | -- | -- | -- |
| 12... | 1-2 | -- | -- | -- | -- | -- | -- | <1 | <10 | <10 | 10 | 6000 |

### 01376313 - TERCIA BROOK AT CHAPPAQUA NY (LAT 41 09 21 LONG 073 46 35)

| DATE | BOTTOM MATERIAL SIEVE DIAMETER RANGE (MM) | NITROGEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) | NITROGEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) | NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) | NITROGEN,TOT IN BOTTOM MATERIAL (MG/KG AS N) | PHOSPHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) | ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) | CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) | CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) | COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) | COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU) | IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1981 | | | | | | | | | | | | |
| 12... | <2 | 1.7 | 12 | 769 | 771 | 630 | -- | -- | -- | -- | -- | -- |
| 12... | 1-2 | -- | -- | -- | -- | -- | -- | 1 | 10 | 10 | 10 | 5800 |

### 01376320 - SAW MILL RIVER AT FLEASANTVILLE NY (LAT 41 07 55 LONG 073 47 47)

| DATE | BOTTOM MATERIAL SIEVE DIAMETER RANGE (MM) | NITROGEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) | NITROGEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) | NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) | NITROGEN,TOT IN BOTTOM MATERIAL (MG/KG AS N) | PHOSPHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) | ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) | CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) | CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) | COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) | COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU) | IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FEB , 1981 | | | | | | | | | | | | |
| 10... | <2 | 1.9 | 10 | 630 | 632 | 360 | 0 | 1 | 20 | -- | 75 | 11000 |
| 10... | 1-2 | 6.4 | 108 | 440 | 446 | 350 | 0 | 2 | <10 | -- | 11 | 4700 |
| 10... | .5-1 | 4.1 | 9.4 | 500 | 504 | 390 | 0 | 1 | <10 | -- | 5 | 2600 |
| 10... | .25-.50 | 4.9 | 28 | 530 | 535 | 510 | 0 | 2 | <10 | -- | 35 | 4000 |
| 10... | .125-.25 | 5.0 | 25 | 750 | 755 | 570 | 0 | 2 | 20 | -- | 23 | 10000 |
| 10... | .063-.125 | 12 | 57 | 3500 | 3510 | 840 | 0 | 7 | 90 | -- | 43 | 6500 |
| 10... | <.063 | 49 | 94 | 11000 | 11100 | 870 | 0 | 11 | 150 | -- | 210 | 25000 |
| MAY | | | | | | | | | | | | |
| 11... | 1-2 | 80 | 3.6 | 553 | 633 | 480 | 0 | 4 | 30 | -- | 18 | 9300 |
| AUG | | | | | | | | | | | | |
| 12... | <2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

### 01376330 - SAW MILL RIVER AT THORNWOOD NY (LAT 41 07 28 LONG 073 47 03)

| DATE | BOTTOM MATERIAL SIEVE DIAMETER RANGE (MM) | NITROGEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) | NITROGEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) | NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) | NITROGEN,TOT IN BOTTOM MATERIAL (MG/KG AS N) | PHOSPHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) | ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) | CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) | CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) | COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) | COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU) | IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1981 | | | | | | | | | | | | |
| 11... | <2 | 1.4 | 5.5 | 561 | 562 | 280 | -- | -- | -- | -- | -- | -- |
| 11... | 1-2 | -- | -- | -- | -- | -- | -- | 1 | <10 | <10 | 10 | 4300 |

### 01376370 - NANNY HAGEN BROOK AT THORNWOOD NY (LAT 41 07 23 LONG 073 46 55)

| DATE | BOTTOM MATERIAL SIEVE DIAMETER RANGE (MM) | NITROGEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) | NITROGEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) | NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) | NITROGEN,TOT IN BOTTOM MATERIAL (MG/KG AS N) | PHOSPHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) | ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) | CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) | CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) | COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) | COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU) | IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1981 | | | | | | | | | | | | |
| 11... | <2 | 4.2 | 8.6 | 449 | 453 | 170 | -- | -- | -- | -- | -- | -- |
| 11... | 1-2 | -- | -- | -- | -- | -- | -- | 1 | <10 | <10 | 10 | 4000 |

### 01376390 - SAW MILL RIVER AT HAWTHORNE NY (LAT 41 06 29 LONG 073 48 11)

| DATE | BOTTOM MATERIAL SIEVE DIAMETER RANGE (MM) | NITROGEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) | NITROGEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) | NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) | NITROGEN,TOT IN BOTTOM MATERIAL (MG/KG AS N) | PHOSPHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) | ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) | CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) | CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) | COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) | COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU) | IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY , 1981 | | | | | | | | | | | | |
| 11... | 1-2 | 2.4 | 3.2 | 351 | 353 | 340 | 0 | 1 | <10 | -- | 12 | 8700 |
| SEP | | | | | | | | | | | | |
| 02... | <2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

### 01376410 - SAW MILL RIVER AT EASTVIEW NY (LAT 41 04 48 LONG 073 49 40)

| DATE | BOTTOM MATERIAL SIEVE DIAMETER RANGE (MM) | NITROGEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) | NITROGEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) | NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) | NITROGEN,TOT IN BOTTOM MATERIAL (MG/KG AS N) | PHOSPHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) | ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) | CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) | CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) | COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) | COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU) | IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY , 1981 | | | | | | | | | | | | |
| 11... | 1-2 | 2.0 | 2.9 | 1270 | 1270 | 770 | 0 | 0 | <10 | -- | 12 | 9800 |
| AUG | | | | | | | | | | | | |
| 11... | <2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

### 01376415 - SAW MILL RIVER NEAR ELMSFORD NY (LAT 41 03 58 LONG 073 49 06)

| DATE | BOTTOM MATERIAL SIEVE DIAMETER RANGE (MM) | NITROGEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) | NITROGEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) | NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) | NITROGEN,TOT IN BOTTOM MATERIAL (MG/KG AS N) | PHOSPHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) | ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) | CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) | CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) | COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) | COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU) | IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1981 | | | | | | | | | | | | |
| 11... | 1-2 | -- | -- | -- | -- | -- | -- | <1 | <10 | <10 | 10 | 5500 |
| 11... | <2 | 2.4 | 15 | 1880 | 1880 | 210 | -- | -- | -- | -- | -- | -- |

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

HUDSON RIVER BASIN--Continued

01376310 - SAW MILL RIVER AT CHAPPAQUA NY (LAT 41 09 50 LONG 073 46 41)

| DATE | LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) | MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) | MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) | NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI) | ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) | CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C) | CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C) | CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C) | CYANIDE TOTAL IN BOTTOM MATERIAL (UG/G AS CN) | PCB, TOTAL IN BOTTOM MATERIAL (UG/KG) | PCN, TOTAL IN BOTTOM MATERIAL (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY , 1981 | | | | | | | | | | | |
| 12... | 27 | 220 | .00 | -- | 30 | 4.7 | .1 | 4.8 | -- | -- | -- |
| 12... | 49 | 390 | .00 | -- | -- | 11 | .6 | 12 | -- | -- | -- |
| 12... | 14 | 160 | .00 | -- | 30 | 2.2 | .1 | 2.3 | -- | -- | -- |
| 12... | 12 | 140 | .00 | -- | 20 | 7.1 | .1 | 7.2 | -- | -- | -- |
| 12... | 68 | 460 | .00 | -- | 90 | 20 | .2 | 20 | -- | -- | -- |
| 12... | 140 | 900 | .00 | -- | 230 | -- | -- | 16 | -- | -- | -- |
| 12... | 110 | 840 | .00 | -- | 180 | 43 | .0 | 43 | -- | -- | -- |
| AUG | | | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | 47 | .8 | 48 | -- | 20 | <1.0 |
| 12... | 90 | 190 | -- | 10 | 28 | -- | -- | -- | 0 | -- | -- |

01376313 - TERCIA BROOK AT CHAPPAQUA NY (LAT 41 09 21 LONG 073 46 35)

| DATE | LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) | MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) | MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) | NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI) | ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) | CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C) | CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C) | CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C) | CYANIDE TOTAL IN BOTTOM MATERIAL (UG/G AS CN) | PCB, TOTAL IN BOTTOM MATERIAL (UG/KG) | PCN, TOTAL IN BOTTOM MATERIAL (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1981 | | | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | 20 | 200 | -- | 10 | 42 | -- | -- | -- | 0 | -- | -- |

01376320 - SAW MILL RIVER AT PLEASANTVILLE NY (LAT 41 07 55 LONG 073 47 47)

| DATE | LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) | MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) | MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) | NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI) | ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) | CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C) | CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C) | CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C) | CYANIDE TOTAL IN BOTTOM MATERIAL (UG/G AS CN) | PCB, TOTAL IN BOTTOM MATERIAL (UG/KG) | PCN, TOTAL IN BOTTOM MATERIAL (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FEB , 1981 | | | | | | | | | | | |
| 10... | 240 | 330 | .00 | -- | 130 | 6.3 | 8.7 | 15 | -- | 10 | <1.0 |
| 10... | 54 | 490 | .00 | -- | 33 | 7.0 | 30 | 37 | -- | -- | -- |
| 10... | 38 | 210 | .00 | -- | 24 | 4.0 | 32 | 36 | -- | -- | -- |
| 10... | 83 | 170 | .00 | -- | 35 | 4.0 | 20 | 24 | -- | -- | -- |
| 10... | 330 | 350 | .00 | -- | 90 | 7.0 | 11 | 18 | -- | -- | -- |
| 10... | 270 | 290 | .00 | -- | 120 | 16 | 8.8 | 25 | -- | -- | -- |
| 10... | 350 | 1200 | .01 | -- | 520 | 38 | 5.5 | 43 | -- | -- | -- |
| MAY | | | | | | | | | | | |
| 11... | 93 | 260 | .00 | -- | 70 | 10 | 15 | 25 | -- | -- | -- |
| AUG | | | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | 13 | <1.0 |

01376330 - SAW MILL RIVER AT THORNWOOD NY (LAT 41 07 28 LONG 073 47 03)

| DATE | LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) | MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) | MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) | NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI) | ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) | CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C) | CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C) | CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C) | CYANIDE TOTAL IN BOTTOM MATERIAL (UG/G AS CN) | PCB, TOTAL IN BOTTOM MATERIAL (UG/KG) | PCN, TOTAL IN BOTTOM MATERIAL (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1981 | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11... | 20 | 96 | -- | 10 | 33 | -- | -- | -- | 0 | -- | -- |

01376370 - NANNY HAGEN BROOK AT THORNWOOD NY (LAT 41 07 23 LONG 073 46 55)

| DATE | LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) | MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) | MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) | NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI) | ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) | CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C) | CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C) | CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C) | CYANIDE TOTAL IN BOTTOM MATERIAL (UG/G AS CN) | PCB, TOTAL IN BOTTOM MATERIAL (UG/KG) | PCN, TOTAL IN BOTTOM MATERIAL (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1981 | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11... | 70 | 240 | -- | <10 | 33 | -- | -- | -- | 0 | -- | -- |

01376390 - SAW MILL RIVER AT HAWTHORNE NY (LAT 41 06 29 LONG 073 48 11)

| DATE | LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) | MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) | MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) | NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI) | ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) | CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C) | CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C) | CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C) | CYANIDE TOTAL IN BOTTOM MATERIAL (UG/G AS CN) | PCB, TOTAL IN BOTTOM MATERIAL (UG/KG) | PCN, TOTAL IN BOTTOM MATERIAL (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY , 1981 | | | | | | | | | | | |
| 11... | 23 | 160 | .00 | -- | 40 | 4.1 | 5.5 | 9.6 | -- | -- | -- |
| SEP | | | | | | | | | | | |
| 02... | -- | -- | -- | -- | -- | -- | -- | -- | -- | 42 | <1.0 |

01376410 - SAW MILL RIVER AT EASTVIEW NY (LAT 41 04 48 LONG 073 49 40)

| DATE | LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) | MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) | MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) | NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI) | ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) | CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C) | CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C) | CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C) | CYANIDE TOTAL IN BOTTOM MATERIAL (UG/G AS CN) | PCB, TOTAL IN BOTTOM MATERIAL (UG/KG) | PCN, TOTAL IN BOTTOM MATERIAL (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY , 1981 | | | | | | | | | | | |
| 11... | 21 | 310 | .00 | -- | 50 | 4.3 | 4.3 | 8.6 | -- | -- | -- |
| AUG | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | <1 | <1.0 |

01376415 - SAW MILL RIVER NEAR ELMSFORD NY (LAT 41 03 58 LONG 073 49 06)

| DATE | LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) | MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) | MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) | NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI) | ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) | CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C) | CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C) | CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C) | CYANIDE TOTAL IN BOTTOM MATERIAL (UG/G AS CN) | PCB, TOTAL IN BOTTOM MATERIAL (UG/KG) | PCN, TOTAL IN BOTTOM MATERIAL (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1981 | | | | | | | | | | | |
| 11... | 10 | 150 | -- | 10 | 37 | -- | -- | -- | 0 | -- | -- |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

HUDSON RIVER BASIN--Continued

01376310 - SAW MILL RIVER AT CHAPPAQUA NY (LAT 41 09 50 LONG 073 46 41)

| DATE | ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDD, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDE, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDT, TOTAL IN BOTTOM MATERIAL (UG/KG) | DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG) | DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG) | HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY , 1981 | | | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG | | | | | | | | | | | |
| 12... | <.1 | 91 | <.1 | 12 | <.1 | <.1 | 1.8 | <.1 | <.1 | <.1 | <.1 |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

01376313 - TERCIA BROOK AT CHAPPAQUA NY (LAT 41 09 21 LONG 073 46 35)

| DATE | ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDD, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDE, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDT, TOTAL IN BOTTOM MATERIAL (UG/KG) | DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG) | DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG) | HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1981 | | | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

01376320 - SAW MILL RIVER AT PLEASANTVILLE NY (LAT 41 07 55 LONG 073 47 47)

| DATE | ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDD, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDE, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDT, TOTAL IN BOTTOM MATERIAL (UG/KG) | DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG) | DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG) | HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FEB , 1981 | | | | | | | | | | | |
| 10... | <.1 | 38 | 1.2 | 8.4 | 4.1 | <.1 | 1.4 | <.1 | <.1 | <.1 | <.1 |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAY | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG | | | | | | | | | | | |
| 12... | <.1 | 32 | 1.6 | <.1 | 4.2 | <.1 | .9 | <.1 | <.1 | <.1 | <.1 |

01376330 - SAW MILL RIVER AT THORNWOOD NY (LAT 41 07 28 LONG 073 47 03)

| DATE | ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDD, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDE, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDT, TOTAL IN BOTTOM MATERIAL (UG/KG) | DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG) | DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG) | HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1981 | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

01376370 - NANNY HAGEN BROOK AT THORNWOOD NY (LAT 41 07 23 LONG 073 46 55)

| DATE | ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDD, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDE, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDT, TOTAL IN BOTTOM MATERIAL (UG/KG) | DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG) | DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG) | HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1981 | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

01376390 - SAW MILL RIVER AT HAWTHORNE NY (LAT 41 06 29 LONG 073 48 11)

| DATE | ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDD, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDE, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDT, TOTAL IN BOTTOM MATERIAL (UG/KG) | DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG) | DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG) | HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY , 1981 | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | | | |
| 02... | <.1 | 55 | 2.2 | 5.6 | 8.2 | <.1 | .3 | <.1 | <.1 | <.1 | <.1 |

01376410 - SAW MILL RIVER AT EASTVIEW NY (LAT 41 04 48 LONG 073 49 40)

| DATE | ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDD, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDE, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDT, TOTAL IN BOTTOM MATERIAL (UG/KG) | DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG) | DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG) | HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY , 1981 | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG | | | | | | | | | | | |
| 11... | <.1 | 8.0 | <.1 | <.1 | 1.9 | <.1 | .7 | <.1 | <.1 | <.1 | <.1 |

01376415 - SAW MILL RIVER NEAR ELMSFORD NY (LAT 41 03 58 LONG 073 49 06)

| DATE | ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDD, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDE, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDT, TOTAL IN BOTTOM MATERIAL (UG/KG) | DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG) | DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG) | HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1981 | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

## ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) | LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG) | MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG) | METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG) | METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG) | METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG) | MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG) | PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG) | PERTHANE IN BOTTOM MATERIL (UG/KG) | TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG) | TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| HUDSON RIVER BASIN--Continued | | | | | | | | | | | |
| 01376310 - SAW MILL RIVER AT CHAPPAQUA NY (LAT 41 09 50 LONG 073 46 41) | | | | | | | | | | | |
| MAY , 1981 | | | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG | | | | | | | | | | | |
| 12... | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.10 | <1.0 | <.1 |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01376313 - TERCIA BROOK AT CHAPPAQUA NY (LAT 41 09 21 LONG 073 46 35) | | | | | | | | | | | |
| AUG , 1981 | | | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01376320 - SAW MILL RIVER AT PLEASANTVILLE NY (LAT 41 07 55 LONG 073 47 47) | | | | | | | | | | | |
| FEB , 1981 | | | | | | | | | | | |
| 10... | .4 | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.10 | <1.0 | <.1 |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAY | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG | | | | | | | | | | | |
| 12... | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.10 | <1.0 | <.1 |
| 01376330 - SAW MILL RIVER AT THORNWOOD NY (LAT 41 07 28 LONG 073 47 03) | | | | | | | | | | | |
| AUG , 1981 | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01376370 - NANNY HAGEN BROOK AT THORNWOOD NY (LAT 41 07 23 LONG 073 46 55) | | | | | | | | | | | |
| AUG , 1981 | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01376390 - SAW MILL RIVER AT HAWTHORNE NY (LAT 41 06 29 LONG 073 48 11) | | | | | | | | | | | |
| MAY , 1981 | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | | | |
| 02... | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.10 | <1.0 | <.1 |
| 01376410 - SAW MILL RIVER AT EASTVIEW NY (LAT 41 04 48 LONG 073 49 40) | | | | | | | | | | | |
| MAY , 1981 | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG | | | | | | | | | | | |
| 11... | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.10 | <1.0 | <.1 |
| 01376415 - SAW MILL RIVER NEAR ELMSFORD NY (LAT 41 03 58 LONG 073 49 06) | | | | | | | | | | | |
| AUG , 1981 | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

## WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | BOTTOM MATERIAL SIEVE DIAMETER RANGE (MM) | NITROGEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) | NITROGEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) | NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) | NITROGEN,TOT IN BOTTOM MATERIAL (MG/KG AS N) | PHOSPHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) | ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) | CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) | CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) | COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) | COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU) | IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HUDSON RIVER BASIN--Continued | | | | | | | | | | | | |
| 01376417 - MINE BROOK AT ELMSFORD NY (LAT 41 03 57 LONG 073 49 00) | | | | | | | | | | | | |
| AUG , 1981 | | | | | | | | | | | | |
| 11... | <2 | 9.2 | 6.8 | 499 | 508 | 200 | -- | -- | -- | -- | -- | -- |
| 11... | 1-2 | -- | -- | -- | -- | -- | -- | <1 | 10 | 10 | 10 | 4300 |
| 01376420 - SAW MILL RIVER AT ELMSFORD NY (LAT 41 03 19 LONG 073 49 16) | | | | | | | | | | | | |
| MAY , 1981 | | | | | | | | | | | | |
| 11... | 1-2 | 3.1 | 9.0 | 565 | 568 | 470 | 0 | 0 | 10 | -- | 15 | 11000 |
| AUG | | | | | | | | | | | | |
| 11... | <2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01376440 - SAW MILL RIVER AT WORTHINGTON NY (LAT 41 01 51 LONG 073 50 37) | | | | | | | | | | | | |
| MAY , 1981 | | | | | | | | | | | | |
| 11... | 1-2 | 3.1 | 4.4 | 48 | 51 | 220 | 0 | 0 | <10 | -- | 9 | 6800 |
| AUG | | | | | | | | | | | | |
| 12... | <2 | 1.5 | 11 | 510 | 512 | 430 | -- | -- | -- | -- | -- | -- |
| 12... | 1-2 | -- | -- | -- | -- | -- | -- | <1 | <10 | <10 | 10 | 5700 |
| 01376443 - SAW MILL RIVER AT WOODLANDS NY (LAT 41 01 23 LONG 073 50 44) | | | | | | | | | | | | |
| SEP , 1981 | | | | | | | | | | | | |
| 01... | 1-2 | -- | -- | -- | -- | -- | -- | <1 | 260 | <10 | 9 | 5100 |
| 01376450 - SAW MILL RIVER AT MOUNT HOPE NY (LAT 40 59 09 LONG 073 51 54) | | | | | | | | | | | | |
| MAY , 1981 | | | | | | | | | | | | |
| 11... | <2 | 1.9 | 5.6 | 363 | 365 | 330 | 0 | 0 | 10 | -- | 11 | 5000 |
| 11... | 1-2 | 2.8 | 5.8 | 1020 | 1020 | 360 | 0 | 0 | 20 | -- | 16 | 10000 |
| 11... | .5-1 | 2.2 | 11 | 374 | 376 | 240 | 0 | 0 | 25 | -- | 31 | 6000 |
| 11... | .25-50 | 2.4 | 2.4 | 345 | 347 | 250 | 0 | 0 | <10 | -- | 8 | 4900 |
| 11... | .125-.25 | 5.9 | 3.2 | 470 | 476 | 810 | 0 | 0 | 20 | -- | 12 | 12000 |
| 11... | .063-.125 | 58 | 42 | 2620 | 2680 | 1100 | 0 | 0 | 50 | -- | 30 | 11000 |
| 11... | <.063 | 16 | 63 | 27800 | 27800 | 1200 | 0 | 0 | 80 | -- | 88 | 28000 |
| SEP | | | | | | | | | | | | |
| 01... | <2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01376460 - SAW MILL RIVER AT GREY OAKS AT YONKERS NY (LAT 40 57 58 LONG 073 52 19) | | | | | | | | | | | | |
| FEB , 1981 | | | | | | | | | | | | |
| 10... | <2 | 21 | 35 | 1900 | 1920 | 480 | 0 | 2 | 50 | -- | 67 | 20000 |
| AUG | | | | | | | | | | | | |
| 12... | <2 | 2.9 | 11 | 1050 | 1050 | 360 | -- | <1 | <10 | <10 | 10 | 4300 |
| 12... | 1-2 | -- | -- | -- | -- | -- | -- | <1 | <10 | <10 | <10 | 1900 |
| 12... | .50-1 | 1.9 | 5.1 | 68 | 70 | 170 | -- | <1 | <10 | <10 | <10 | 1900 |
| 12... | .25-.50 | 1.5 | 10 | 41 | 43 | 66 | -- | <1 | <10 | <10 | <10 | 2900 |
| 12... | .125-.25 | -- | -- | -- | -- | -- | -- | <1 | 10 | 10 | 10 | 5400 |
| 12... | .063-.125 | -- | -- | -- | -- | -- | -- | 1 | 30 | <10 | 20 | 14000 |
| 12... | <.063 | 5.8 | 37 | 9760 | 9770 | 900 | -- | <1 | 65 | 20 | 60 | 24000 |
| 01376470 - SAW MILL RIVER AT OLD NEPPERHAN RD AT YONKERS NY (LAT 40 57 18 LONG 073 52 28) | | | | | | | | | | | | |
| AUG , 1981 | | | | | | | | | | | | |
| 12... | <2 | 4.7 | 6.0 | 780 | 785 | 340 | -- | -- | -- | -- | -- | -- |
| 12... | 1-2 | -- | -- | -- | -- | -- | -- | 1 | 20 | <10 | 70 | 4800 |
| 01376475 - SAW MILL RIVER AT WORTH ST AT YONKERS NY (LAT 40 57 05 LONG 073 52 41) | | | | | | | | | | | | |
| MAY , 1981 | | | | | | | | | | | | |
| 11... | 1-2 | 2.0 | 3.3 | 713 | 715 | 270 | 0 | 0 | 10 | -- | 37 | 10000 |
| AUG | | | | | | | | | | | | |
| 12... | <2 | 2.3 | 8.1 | 478 | 480 | 240 | -- | -- | -- | -- | -- | -- |
| 12... | 1-2 | -- | -- | -- | -- | -- | -- | <1 | 10 | <10 | 20 | 4900 |

## ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) | MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) | MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) | NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI) | ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) | CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C) | CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C) | CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C) | CYANIDE TOTAL IN BOTTOM MATERIAL (UG/G AS CN) | PCB, TOTAL IN BOTTOM MATERIAL (UG/KG) | PCN, TOTAL IN BOTTOM MATERIAL (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| HUDSON RIVER BASIN--Continued | | | | | | | | | | | |
| 01376417 - MINE BROOK AT ELMSFORD NY (LAT 41 03 57 LONG 073 49 00) | | | | | | | | | | | |
| AUG , 1981 | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11... | 30 | 150 | -- | 10 | 56 | -- | -- | -- | 0 | -- | -- |
| 01376420 - SAW MILL RIVER AT ELMSFORD NY (LAT 41 03 19 LONG 073 49 16) | | | | | | | | | | | |
| MAY , 1981 | | | | | | | | | | | |
| 11... | 42 | 340 | .00 | -- | 80 | 12 | 4.0 | 16 | -- | -- | -- |
| AUG | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | 19 | <1.0 |
| 01376440 - SAW MILL RIVER AT WORTHINGTON NY (LAT 41 01 51 LONG 073 50 37) | | | | | | | | | | | |
| MAY , 1981 | | | | | | | | | | | |
| 11... | 110 | 120 | .00 | -- | 40 | 3.1 | 1.8 | 4.9 | -- | -- | -- |
| AUG | | | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | <1 | <1.0 |
| 12... | 20 | 96 | -- | 10 | 39 | -- | -- | -- | 0 | -- | -- |
| 01376443 - SAW MILL RIVER AT WOODLANDS NY (LAT 41 01 23 LONG 073 50 44) | | | | | | | | | | | |
| SEP , 1981 | | | | | | | | | | | |
| 01... | 25 | 320 | -- | 10 | 33 | -- | -- | -- | 0 | -- | -- |
| 01376450 - SAW MILL RIVER AT MOUNT HOPE NY (LAT 40 59 09 LONG 073 51 54) | | | | | | | | | | | |
| MAY , 1981 | | | | | | | | | | | |
| 11... | 58 | 100 | .00 | -- | 40 | 3.5 | 2.8 | 6.3 | -- | -- | -- |
| 11... | 52 | 190 | .00 | -- | 50 | 9.2 | 1.8 | 11 | -- | -- | -- |
| 11... | 38 | 120 | .00 | -- | 50 | 3.6 | 2.7 | 6.3 | -- | -- | -- |
| 11... | 68 | 160 | .00 | -- | 30 | 2.2 | 3.0 | 5.2 | -- | -- | -- |
| 11... | 120 | 500 | .00 | -- | 40 | 2.8 | 1.8 | 4.6 | -- | -- | -- |
| 11... | 87 | 590 | .00 | -- | 110 | 13 | 2.4 | 15 | -- | -- | -- |
| 11... | 280 | 2000 | .01 | -- | 300 | -- | -- | 42 | -- | -- | -- |
| SEP | | | | | | | | | | | |
| 01... | -- | -- | -- | -- | -- | -- | -- | -- | -- | 110 | <1.0 |
| 01376460 - SAW MILL RIVER AT GREY OAKS AT YONKERS NY (LAT 40 57 58 LONG 073 52 19) | | | | | | | | | | | |
| FEB , 1981 | | | | | | | | | | | |
| 10... | 250 | 380 | .00 | -- | 210 | 28 | 2.1 | 30 | -- | -- | -- |
| AUG | | | | | | | | | | | |
| 12... | 30 | 100 | -- | 10 | 33 | 7.8 | .3 | 8.1 | 0 | 58 | <1.0 |
| 12... | 30 | 32 | -- | <10 | 11 | -- | -- | -- | 0 | -- | -- |
| 12... | 10 | 30 | -- | <10 | 7 | 6.7 | .4 | 7.1 | 0 | -- | -- |
| 12... | 10 | 52 | -- | <10 | 14 | 2.1 | .4 | 2.5 | 0 | -- | -- |
| 12... | 20 | 88 | -- | 10 | 26 | -- | -- | -- | 0 | -- | -- |
| 12... | 60 | 270 | -- | 20 | 87 | -- | -- | -- | 0 | -- | -- |
| 12... | 170 | 680 | -- | 30 | 220 | 24 | 1.0 | 25 | 0 | -- | -- |
| 01376470 - SAW MILL RIVER AT OLD NEPPERHAN RD AT YONKERS NY (LAT 40 57 18 LONG 073 52 28) | | | | | | | | | | | |
| AUG , 1981 | | | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | 90 | 200 | -- | 10 | 190 | -- | -- | -- | 0 | -- | -- |
| 01376475 - SAW MILL RIVER AT WORTH ST AT YONKERS NY (LAT 40 57 05 LONG 073 52 41) | | | | | | | | | | | |
| MAY , 1981 | | | | | | | | | | | |
| 11... | 140 | 200 | .00 | -- | 90 | 16 | 4.4 | 20 | -- | -- | -- |
| AUG | | | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2100 | <1.0 |
| 12... | 90 | 120 | -- | <10 | 94 | -- | -- | -- | 0 | -- | -- |

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDD, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDE, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDT, TOTAL IN BOTTOM MATERIAL (UG/KG) | DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG) | DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG) | HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| HUDSON RIVER BASIN--Continued | | | | | | | | | | | |
| 01376417 - MINE BROOK AT ELMSFORD NY (LAT 41 03 57 LONG 073 49 00) | | | | | | | | | | | |
| AUG , 1981 | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01376420 - SAW MILL RIVER AT ELMSFORD NY (LAT 41 03 19 LONG 073 49 16) | | | | | | | | | | | |
| MAY , 1981 | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG | | | | | | | | | | | |
| 11... | <.1 | 6.0 | 2.0 | .6 | 1.4 | <.1 | .3 | <.1 | <.1 | <.1 | <.1 |
| 01376440 - SAW MILL RIVER AT WORTHINGTON NY (LAT 41 01 51 LONG 073 50 37) | | | | | | | | | | | |
| MAY , 1981 | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG | | | | | | | | | | | |
| 12... | <.1 | 43 | <.1 | <.1 | 1.9 | <.1 | .7 | <.1 | <.1 | <.1 | <.1 |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01376443 - SAW MILL RIVER AT WOODLANDS NY (LAT 41 01 23 LONG 073 50 44) | | | | | | | | | | | |
| SEP , 1981 | | | | | | | | | | | |
| 01... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01376450 - SAW MILL RIVER AT MOUNT HOPE NY (LAT 40 59 09 LONG 073 51 54) | | | | | | | | | | | |
| MAY , 1981 | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | | | |
| 01... | <.1 | 17 | 6.2 | 1.6 | 3.2 | <.1 | .3 | <.1 | <.1 | <.1 | <.1 |
| 01376460 - SAW MILL RIVER AT GREY OAKS AT YONKERS NY (LAT 40 57 58 LONG 073 52 19) | | | | | | | | | | | |
| FEB , 1981 | | | | | | | | | | | |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG | | | | | | | | | | | |
| 12... | <.1 | 44 | 9.2 | .6 | 1.2 | <.1 | 1.1 | <.1 | <.1 | <.1 | <.1 |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01376470 - SAW MILL RIVER AT OLD NEPPERHAN RD AT YONKERS NY (LAT 40 57 18 LONG 073 52 28) | | | | | | | | | | | |
| AUG , 1981 | | | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01376475 - SAW MILL RIVER AT WORTH ST AT YONKERS NY (LAT 40 57 05 LONG 073 52 41) | | | | | | | | | | | |
| MAY , 1981 | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG | | | | | | | | | | | |
| 12... | <.1 | 69 | <.1 | .9 | <.1 | <.1 | 1.5 | <.1 | <.1 | <.1 | <.1 |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

## ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

### HUDSON RIVER BASIN--Continued

| DATE | HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) | LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG) | MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG) | METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG) | METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG) | METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG) | MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG) | PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG) | PERTHANE IN BOTTOM MATERIL (UG/KG) | TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG) | TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 01376417 - MINE BROOK AT ELMSFORD NY (LAT 41 03 57 LONG 073 49 00) | | | | | | | | | | | |
| AUG , 1981 | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01376420 - SAW MILL RIVER AT ELMSFORD NY (LAT 41 03 19 LONG 073 49 16) | | | | | | | | | | | |
| MAY , 1981 | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG | | | | | | | | | | | |
| 11... | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.10 | <1.0 | <.1 |
| 01376440 - SAW MILL RIVER AT WORTHINGTON NY (LAT 41 01 51 LONG 073 50 37) | | | | | | | | | | | |
| MAY , 1981 | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG | | | | | | | | | | | |
| 12... | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.10 | <1.0 | <.1 |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01376443 - SAW MILL RIVER AT WOODLANDS NY (LAT 41 01 23 LONG 073 50 44) | | | | | | | | | | | |
| SEP , 1981 | | | | | | | | | | | |
| 01... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01376450 - SAW MILL RIVER AT MOUNT HOPE NY (LAT 40 59 09 LONG 073 51 54) | | | | | | | | | | | |
| MAY , 1981 | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | | | |
| 01... | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.10 | <1.0 | <.1 |
| 01376460 - SAW MILL RIVER AT GREY OAKS AT YONKERS NY (LAT 40 57 58 LONG 073 52 19) | | | | | | | | | | | |
| FEB , 1981 | | | | | | | | | | | |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG | | | | | | | | | | | |
| 12... | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.10 | <1.0 | <.1 |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01376470 - SAW MILL RIVER AT OLD NEPPERHAN RD AT YONKERS NY (LAT 40 57 18 LONG 073 52 28) | | | | | | | | | | | |
| AUG , 1981 | | | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01376475 - SAW MILL RIVER AT WORTH ST AT YONKERS NY (LAT 40 57 05 LONG 073 52 41) | | | | | | | | | | | |
| MAY , 1981 | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG | | | | | | | | | | | |
| 12... | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.10 | <1.0 | <.1 |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

HUDSON RIVER BASIN--Continued

01376495 - SAW MILL RIVER AT ASHBURTON AVE AT YONKERS NY (LAT 40 56 18 LONG 073 53 05)

| DATE | BOTTOM MATERIAL SIEVE DIAMETER RANGE (MM) | NITROGEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) | NITROGEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) | NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) | NITROGEN,TOT IN BOTTOM MATERIAL (MG/KG AS N) | PHOSPHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) | ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) | CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) | CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) | COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) | COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU) | IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY , 1981 | | | | | | | | | | | | |
| 11... | 1-2 | 8.5 | 5.4 | 296 | 305 | 580 | 0 | 3 | 70 | -- | 83 | 12000 |
| 11... | .50-1 | 3.4 | 3.4 | 208 | 211 | 350 | 0 | 1 | <10 | -- | 25 | 5000 |
| AUG | | | | | | | | | | | | |
| 12... | <2 | 4.6 | 8.7 | 490 | 495 | 400 | -- | <1 | <10 | <10 | 90 | 2400 |
| 12... | 1-2 | 2.8 | 19 | 621 | 624 | 400 | -- | <1 | <10 | <10 | 100 | 1900 |
| 12... | .5-1 | 3.3 | 5.8 | 520 | 523 | 340 | -- | <1 | <10 | <10 | 100 | 1800 |
| 12... | .25-.50 | 6.8 | 4.0 | 258 | 265 | 42 | -- | <1 | <10 | <10 | 80 | 2300 |
| 12... | .125-.250 | -- | -- | -- | -- | -- | -- | <1 | <10 | <10 | 130 | 3000 |
| 12... | .063-.125 | -- | -- | -- | -- | -- | -- | <1 | 30 | <10 | 230 | 8100 |
| 12... | <.063 | -- | -- | -- | -- | -- | -- | 3 | 60 | <10 | 500 | 23000 |

01376501 - SAW MILL RIVER OFF WALSH RD AT YONKERS NY (LAT 40 56 17 LONG 073 53 23)

| DATE | BOTTOM MATERIAL SIEVE DIAMETER RANGE (MM) | NITROGEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) | NITROGEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) | NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) | NITROGEN,TOT IN BOTTOM MATERIAL (MG/KG AS N) | PHOSPHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) | ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) | CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) | CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) | COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) | COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU) | IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1981 | | | | | | | | | | | | |
| 12... | <2 | 3.7 | 4.5 | 405 | 409 | 310 | -- | -- | -- | -- | -- | -- |
| 12... | 1-2 | -- | -- | -- | -- | -- | -- | 2 | <10 | <10 | 50 | 5200 |

01376503 - SAW MILL RIVER AT ELM ST AT YONKERS NY (LAT 40 56 03 LONG 073 53 00)

| DATE | BOTTOM MATERIAL SIEVE DIAMETER RANGE (MM) | NITROGEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) | NITROGEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) | NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) | NITROGEN,TOT IN BOTTOM MATERIAL (MG/KG AS N) | PHOSPHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) | ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) | CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) | CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) | COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) | COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU) | IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FEB , 1981 | | | | | | | | | | | | |
| 10... | <2 | 2.6 | .1 | 750 | 753 | 550 | 0 | 1 | 10 | -- | 81 | 6800 |
| 10... | 1-2 | 4.0 | 25 | 910 | 914 | 460 | 0 | 2 | <10 | -- | 27 | 9500 |
| 10... | .50-1 | 5.6 | 31 | 440 | 446 | 380 | 0 | 1 | <10 | -- | 100 | 4800 |
| 10... | .25-.50 | 3.2 | 34 | 810 | 813 | 530 | 0 | 2 | <10 | -- | 80 | 2000 |
| 10... | .125-.25 | 5.0 | 39 | 920 | 925 | 480 | 0 | 2 | 10 | -- | 140 | 5500 |
| 10... | .063-.125 | 18 | 50 | 980 | 998 | 860 | 0 | 6 | 20 | -- | 74 | 9700 |
| 10... | <.063 | 8.0 | 80 | 5400 | 5410 | 1300 | 0 | 5 | 50 | -- | 170 | 18000 |
| MAY | | | | | | | | | | | | |
| 11... | 1-2 | 5.1 | 3.1 | 379 | 384 | 340 | 0 | 0 | 10 | -- | 20 | 11000 |
| AUG | | | | | | | | | | | | |
| 12... | <2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | 1-2 | -- | -- | -- | -- | -- | -- | 1 | 10 | <10 | 50 | 5500 |

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

HUDSON RIVER BASIN--Continued

### 01376495 - SAW MILL RIVER AT ASHBURTON AVE AT YONKERS NY (LAT 40 56 18 LONG 073 53 05)

| DATE | LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) | MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) | MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) | NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI) | ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) | CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C) | CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C) | CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C) | CYANIDE TOTAL IN BOTTOM MATERIAL (UG/G AS CN) | PCB, TOTAL IN BOTTOM MATERIAL (UG/KG) | PCN, TOTAL IN BOTTOM MATERIAL (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY , 1981 | | | | | | | | | | | |
| 11... | 500 | 460 | .00 | -- | 240 | 136 | 3.5 | 139 | -- | -- | -- |
| 11... | 81 | 270 | .00 | -- | 70 | 2.9 | 1.2 | 4.1 | -- | -- | -- |
| AUG | | | | | | | | | | | |
| 12... | 80 | 75 | -- | <10 | 78 | 11 | 2.5 | 13 | 0 | 210 | <1.0 |
| 12... | 60 | 73 | -- | <10 | 47 | 23 | 2.6 | 26 | 0 | -- | -- |
| 12... | 70 | 72 | -- | <10 | 94 | 8.8 | 3.2 | 12 | 0 | -- | -- |
| 12... | 40 | 66 | -- | <10 | 70 | 68 | 3.3 | 71 | 0 | -- | -- |
| 12... | 140 | 73 | -- | 10 | 77 | -- | -- | -- | 0 | -- | -- |
| 12... | 560 | 220 | -- | 20 | 140 | -- | -- | -- | -- | -- | -- |
| 12... | 570 | 830 | -- | 30 | 470 | -- | -- | -- | 0 | -- | -- |

### 01376501 - SAW MILL RIVER OFF WALSH RD AT YONKERS NY (LAT 40 56 17 LONG 073 53 23)

| DATE | LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) | MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) | MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) | NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI) | ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) | CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C) | CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C) | CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C) | CYANIDE TOTAL IN BOTTOM MATERIAL (UG/G AS CN) | PCB, TOTAL IN BOTTOM MATERIAL (UG/KG) | PCN, TOTAL IN BOTTOM MATERIAL (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1981 | | | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | 470 | 140 | -- | 10 | 660 | -- | -- | -- | 0 | -- | -- |

### 01376503 - SAW MILL RIVER AT ELM ST AT YONKERS NY (LAT 40 56 03 LONG 073 53 00)

| DATE | LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) | MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) | MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) | NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI) | ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) | CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C) | CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C) | CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C) | CYANIDE TOTAL IN BOTTOM MATERIAL (UG/G AS CN) | PCB, TOTAL IN BOTTOM MATERIAL (UG/KG) | PCN, TOTAL IN BOTTOM MATERIAL (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FEB , 1981 | | | | | | | | | | | |
| 10... | 160 | 180 | .00 | -- | 150 | 12 | 2.8 | 15 | -- | 84 | <1.0 |
| 10... | 280 | 250 | .00 | -- | 110 | 15 | 2.8 | 18 | -- | -- | -- |
| 10... | 150 | 260 | .00 | -- | 110 | 7.1 | 2.3 | 9.4 | -- | -- | -- |
| 10... | 60 | 70 | .00 | -- | 45 | 9.6 | 2.4 | 12 | -- | -- | -- |
| 10... | 180 | 140 | .00 | -- | 110 | 15 | 2.1 | 17 | -- | -- | -- |
| 10... | 230 | 210 | .00 | -- | 150 | 18 | 3.3 | 21 | -- | -- | -- |
| 10... | 440 | 560 | .02 | -- | 400 | 28 | 3.4 | 31 | -- | -- | -- |
| MAY | | | | | | | | | | | |
| 11... | 33 | 360 | .00 | -- | 60 | 2.7 | 3.1 | 5.8 | -- | -- | -- |
| AUG | | | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | 110 | <1.0 |
| 12... | 120 | 290 | -- | <10 | 350 | -- | -- | -- | 0 | -- | -- |

## WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDD, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDE, TOTAL IN BOTTOM MATERIAL (UG/KG) | DDT, TOTAL IN BOTTOM MATERIAL (UG/KG) | DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG) | DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) | ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG) | HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| HUDSON RIVER BASIN--Continued | | | | | | | | | | | |
| 01376495 - SAW MILL RIVER AT ASHBURTON AVE AT YONKERS NY (LAT 40 56 18 LONG 073 53 05) | | | | | | | | | | | |
| MAY , 1981 | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG | | | | | | | | | | | |
| 12... | <.1 | 23 | 9.2 | <.1 | 2.6 | <.1 | .9 | <.1 | <.1 | <.1 | <.1 |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01376501 - SAW MILL RIVER OFF WALSH RD AT YONKERS NY (LAT 40 56 17 LONG 073 53 23) | | | | | | | | | | | |
| AUG , 1981 | | | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01376503 - SAW MILL RIVER AT ELM ST AT YONKERS NY (LAT 40 56 03 LONG 073 53 00) | | | | | | | | | | | |
| FEB , 1981 | | | | | | | | | | | |
| 10... | <.1 | 41 | 11 | <.1 | 14 | <.1 | 1.1 | <.1 | <.1 | <.1 | <.1 |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAY | | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG | | | | | | | | | | | |
| 12... | <.1 | 27 | 6.9 | <.1 | 1.1 | <.1 | .7 | <.1 | <.1 | <.1 | <.1 |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) | LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG) | MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG) | METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG) | METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG) | METHYL TRITHION, TOT. IN BOTTCM MATL. (UG/KG) | MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG) | PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG) | PERTHANE IN BOTTOM MATERIL (UG/KG) | TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG) | TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| HUDSON RIVER BASIN--Continued | | | | | | | | | | | |
| 01376495 - SAW MILL RIVER AT ASHBURTON AVE AT YONKERS NY (LAT 40 56 18 LONG 073 53 05) | | | | | | | | | | | |
| MAY , 1981 | | | | | | | | | | | |
| 11... | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 11... | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| AUG | | | | | | | | | | | |
| 12... | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.10 | <1.0 | <.1 |
| 12... | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12... | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12... | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12... | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12... | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12... | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 01376501 - SAW MILL RIVER OFF WALSH RD AT YONKERS NY (LAT 40 56 17 LONG 073 53 23) | | | | | | | | | | | |
| AUG , 1981 | | | | | | | | | | | |
| 12... | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12... | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 01376503 - SAW MILL RIVER AT ELM ST AT YONKERS NY (LAT 40 56 03 LONG 073 53 00) | | | | | | | | | | | |
| FEB , 1981 | | | | | | | | | | | |
| 10... | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.10 | <1.0 | <.1 |
| 10... | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10... | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10... | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10... | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10... | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10... | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MAY | | | | | | | | | | | |
| 11... | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| AUG | | | | | | | | | | | |
| 12... | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.1 | <.10 | <1.0 | <.1 |
| 12... | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

## HUDSON RIVER BASIN

## NEAR DELMAR, NY

LOCATION.--Lat 42°36'36", long 73°53'34", Albany County, at New York State Department of Environmental Conservation's Five River Educational Center, 600 ft (182 m) northwest of vistor's center, 0.7 mi (1.1 km) north of State Highway 443, 3.0 mi (4.8 km) west of Delmar.

PERIOD OF RECORD.--Water year 1980 to current year (monthly composite)
November 1980 to September 1981 (storm event wetfall)
November 1980 to August 1981 (monthly dustfall)

EQUIPMENT.--The composite sample collector is a straight-sided polyethylene funnel approximately 6.5 in (165 mm) in diameter which drains into a Teflon* receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The collector is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level.

The wetfall and dustfall sample collector is an Aerochem Metrics Model 101* wet/dry precipitation collector. An automatic sensor detects occurrences of precipitation, activating a motor which removes a cover from the wetfall collection vessel and covers the dustfall collection vessel. When precipitation ceases the cycle is reversed. The sampling vessels are polyethylene and have a collection diameter of 28.6 cm and a capacity of 13 liters. The opening of the collector is approximately 8 ft (2.5 m) above ground level.

REMARKS.--Inches of precipitation obtained from an on-site recording weighing bucket gage.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

### MONTHLY COMPOSITE

| PERIOD OF COLLECTION | INCHES OF PRECIPITATION | CALCIUM (CA) (MG/L) | MAGNESIUM (MG) (MG/L) | SODIUM (NA) (MG/L) | POTASSIUM (K) (MG/L) | SULFATE (SO4) (MG/L) | CHLORIDE (CL) (MG/L) |
|---|---|---|---|---|---|---|---|
| 80/09/30 TO 80/12/01 | 3.56 | 1.50 | .18 | .28 | .13 | 5.00 | .01 |
| 80/12/01 TO 81/01/01 | .56 | — | — | — | — | 2.80 | .38 |
| 81/01/01 TO 81/02/02 | 1.13 | — | — | — | — | 3.70 | .88 |
| 81/02/01 TO 81/02/28 | 4.71 | .37 | 1.10 | 1.00 | .06 | 1.70 | 2.00 |
| 81/02/28 TO 81/04/05 | .60 | — | — | — | — | 6.00 | .60 |
| 81/04/05 TO 81/05/01 | 1.86 | 1.00 | .01 | .17 | .11 | 3.90 | .40 |
| 81/05/01 TO 81/05/31 | 2.98 | .75 | .14 | .22 | .44 | 4.30 | .37 |
| 81/05/31 TO 81/06/30 | 2.79 | 2.00 | .10 | .25 | .30 | 9.90 | .29 |
| 81/06/30 TO 81/07/28 | 3.42 | .67 | .21 | .30 | .86 | 4.30 | .39 |
| 81/07/31 TO 81/08/31 | .70 | .76 | .19 | .40 | — | — | 1.40 |
| 81/08/31 TO 81/10/05 | 4.04 | .80 | .13 | .19 | .58 | 2.80 | .35 |

| PERIOD OF COLLECTION | NITRITE+ NITRATE AS N (MG/L) | AMMONIA AS N (MG/L) | AMMONIA +ORGANIC NITROGEN AS N (MG/L) | PHOSPHORUS (P) (MG/L) | SPECIFIC CONDUCTANCE (MICROMHOS) | PH (UNITS) | LEAD (PB) (UG/L) |
|---|---|---|---|---|---|---|---|
| 80/09/30 TO 80/12/01 | .49 | .62 | .50 | .068 | 24 | 4.98 | 12 |
| 80/12/01 TO 81/01/01 | .89 | .34 | .25 | .017 | 26 | 4.72 | — |
| 81/01/01 TO 81/02/02 | .90 | .35 | .40 | .017 | 30 | 4.75 | — |
| 81/02/01 TO 81/02/28 | .40 | .10 | .33 | .003 | 24 | 4.55 | 11 |
| 81/02/28 TO 81/04/05 | 1.00 | .68 | — | .010 | 33 | 4.46 | — |
| 81/04/05 TO 81/05/01 | .63 | .56 | .75 | .033 | 21 | 4.52 | 5 |
| 81/05/01 TO 81/05/31 | .34 | 1.50 | 1.90 | .193 | 12 | 6.19 | 10 |
| 81/05/31 TO 81/06/30 | .94 | 1.30 | 1.80 | .108 | 57 | 4.23 | — |
| 81/06/30 TO 81/07/28 | 1.80 | 3.00 | 3.20 | .559 | 43 | 5.68 | 69 |
| 81/07/31 TO 81/08/31 | 3.40 | 2.80 | — | — | — | 4.94 | — |
| 81/08/31 TO 81/10/05 | 2.40 | 1.40 | 1.70 | .173 | 62 | 4.04 | 69 |

* The use of the brand name in this report is for identification purposes only and does not imply endorsement by the U.S. Geological Survey.

# CHEMICAL QUALITY OF PRECIPITATION

## HUDSON RIVER BASIN

## NEAR DELMAR, NY--Continued

### CHEMICAL ANALYSES, NOVEMBER 1980 TO SEPTEMBER 1981

### STORM EVENT WETFALL

| PERIOD OF COLLECTION | INCHES OF PRECIPITATION | CALCIUM (CA) (MG/L) | MAGNESIUM (MG) (MG/L) | SODIUM (NA) (MG/L) | POTASSIUM (K) (MG/L) | SULFATE (SO4) (MG/L) | CHLORIDE (CL) (MG/L) |
|---|---|---|---|---|---|---|---|
| 80/11/20 TO 80/11/25 | .79 | .46 | .16 | .02 | .04 | 1.90 | .00 |
| 80/11/25 TO 80/11/29 | .55 | .24 | .05 | .03 | .04 | 1.70 | .00 |
| 80/12/08 TO 80/12/29 | .77 | .92 | .01 | .59 | .09 | 3.40 | .80 |
| 81/02/04 TO 81/02/13 | 1.10 | .16 | .32 | 2.40 | .12 | 2.50 | 4.30 |
| 81/02/13 TO 81/02/23 | 1.25 | .19 | .23 | .23 | .02 | .90 | .27 |
| 81/03/01 TO 81/03/09 | 1.20 | .50 | .03 | .14 | .01 | — | — |
| 81/04/06 TO 81/04/27 | .81 | .88 | .01 | .26 | .15 | 3.90 | .38 |
| 81/04/27 TO 81/05/03 | .57 | .23 | .01 | .05 | .04 | 2.30 | .12 |
| 81/05/03 TO 81/05/13 | 1.72 | .32 | .01 | .12 | .02 | 2.30 | .22 |
| 81/05/13 TO 81/05/18 | .64 | .31 | .01 | .20 | .04 | 3.70 | .47 |
| 81/05/18 TO 81/05/31 | .65 | .42 | .03 | .17 | .06 | 5.30 | .26 |
| 81/05/31 TO 81/06/15 | 1.36 | .06 | .02 | .10 | .04 | 3.90 | .15 |
| 81/06/15 TO 81/06/23 | .71 | .07 | .01 | .13 | .06 | 7.00 | .59 |
| 81/06/23 TO 81/06/30 | .74 | .02 | .01 | .13 | .03 | 3.00 | .10 |
| 81/06/30 TO 81/07/06 | 1.39 | .16 | .04 | .29 | .04 | 1.60 | .31 |
| 81/07/06 TO 81/07/20 | 1.53 | .20 | .01 | .11 | .04 | 4.20 | .08 |
| 81/07/20 TO 81/07/23 | .37 | .25 | .02 | .17 | .04 | 2.80 | .10 |
| 81/07/31 TO 81/08/07 | .38 | .09 | .01 | .13 | .01 | 4.80 | .15 |
| 81/08/07 TO 81/08/19 | .24 | — | — | — | — | 4.60 | .47 |
| 81/08/31 TO 81/09/07 | .48 | .10 | .01 | .21 | .02 | 1.30 | .17 |
| 81/09/07 TO 81/09/21 | 2.03 | .50 | .06 | .08 | .09 | 5.10 | .09 |
| 81/09/21 TO 81/09/28 | 1.15 | .19 | .01 | .07 | .04 | 2.30 | .00 |

| PERIOD OF COLLECTION | NITRITE+NITRATE AS N (MG/L) | AMMONIA AS N (MG/L) | AMMONIA +ORGANIC NITROGEN AS N (MG/L) | PHOSPHORUS (P) (MG/L) | SPECIFIC CONDUCTANCE (MICRO-(MHOS) | PH (UNITS) | LEAD (PB) (UG/L) |
|---|---|---|---|---|---|---|---|
| 80/11/20 TO 80/11/25 | .29 | .07 | .09 | .002 | 29 | 4.16 | 6 |
| 80/11/25 TO 80/11/29 | .20 | .02 | .15 | .003 | 18 | 4.36 | 13 |
| 80/12/08 TO 80/12/29 | 1.40 | .25 | — | — | 28 | 4.51 | 13 |
| 81/02/04 TO 81/02/13 | .49 | .18 | .28 | .007 | 42 | 4.38 | 16 |
| 81/02/13 TO 81/02/23 | .16 | .07 | .14 | .002 | 10 | 4.49 | 10 |
| 81/03/01 TO 81/03/09 | .42 | .14 | .18 | .001 | 25 | 4.26 | 15 |
| 81/04/06 TO 81/04/27 | .80 | .57 | .80 | .068 | 42 | 4.12 | 13 |
| 81/04/27 TO 81/05/03 | .50 | .20 | .47 | .013 | 29 | 4.13 | 9 |
| 81/05/03 TO 81/05/13 | .14 | .13 | .26 | .001 | 18 | 4.43 | 5 |
| 81/05/13 TO 81/05/18 | .30 | .22 | .42 | .001 | 25 | 4.27 | 7 |
| 81/05/18 TO 81/05/31 | .66 | .57 | .63 | .001 | 57 | 3.98 | 10 |
| 81/05/31 TO 81/06/15 | .48 | .36 | .74 | .001 | 37 | 4.07 | — |
| 81/06/15 TO 81/06/23 | .58 | .62 | .82 | .003 | 67 | 3.82 | — |
| 81/06/23 TO 81/06/30 | .34 | .33 | .53 | .001 | 30 | 4.17 | — |
| 81/06/30 TO 81/07/06 | .21 | .07 | .10 | .003 | 16 | 4.51 | 14 |
| 81/07/06 TO 81/07/20 | .56 | .43 | .48 | .001 | 47 | 4.00 | 24 |
| 81/07/20 TO 81/07/23 | .75 | .20 | .29 | .002 | 45 | 4.00 | — |
| 81/07/31 TO 81/08/07 | .66 | .36 | .60 | .007 | 61 | 3.85 | 15 |
| 81/08/07 TO 81/08/19 | — | — | — | — | 68 | 3.82 | — |
| 81/08/31 TO 81/09/07 | 1.20 | .10 | .30 | .004 | 15 | 4.50 | — |
| 81/09/07 TO 81/09/21 | .78 | .77 | .92 | .022 | 58 | 3.94 | — |
| 81/09/21 TO 81/09/28 | .54 | .35 | .62 | .001 | 41 | 4.40 | — |

## HUDSON RIVER BASIN

## NEAR DELMAR, NY--Continued

### CHEMICAL ANALYSES, NOVEMBER 1980 TO AUGUST 1981

### MONTHLY DUSTFALL

| PERIOD OF COLLECTION | INCHES OF PRECIPI- TATION | CAL- CIUM (CA) (MG/L) | MAGNE- SIUM (MG) (MG/L) | SODIUM (NA) (MG/L) | POTAS- SIUM (K) (MG/L) | SULFATE (SO4) (MG/L) | CHLO- RIDE (CL) (MG/L) |
|---|---|---|---|---|---|---|---|
| 80/11/21 TO 81/01/01 | 2.35 | 3.80 | .41 | .89 | 1.30 | 8.20 | 1.20 |
| 81/02/13 TO 81/02/28 | 2.38 | 3.90 | 1.90 | 1.80 | .23 | 8.30 | 2.00 |
| 81/02/28 TO 81/04/05 | .60 | 3.70 | .44 | .58 | .21 | 8.20 | .45 |
| 81/04/05 TO 81/05/01 | 1.86 | 3.40 | .22 | .26 | .77 | 4.70 | .64 |
| 81/05/01 TO 81/05/31 | 2.98 | 2.50 | .31 | .26 | .77 | 3.30 | .43 |
| 81/05/31 TO 81/06/30 | 2.79 | 1.90 | .09 | .19 | .32 | 3.50 | .13 |
| 81/06/30 TO 81/07/31 | 3.42 | 1.60 | .08 | .24 | .20 | 2.80 | .27 |
| 81/07/31 TO 81/08/31 | .70 | 1.80 | .21 | .17 | .26 | 3.50 | .21 |

| PERIOD OF COLLECTION | NIT- RITE+ NIT- RATE AS N (MG/L) | AMMONIA AS N (MG/L) | AMMONIA +ORGANIC NITROGEN AS N (MG/L) | PHOS- PHORUS (P) (MG/L) | SPE- CIFIC CON- DUCTANCE (MICRO- (MHOS) | PH (UNITS) | LEAD (PB) (UG/L) |
|---|---|---|---|---|---|---|---|
| 80/11/21 TO 81/01/01 | .52 | .09 | .32 | .049 | 35 | 6.40 | 3 |
| 81/02/13 TO 81/02/28 | 1.20 | .15 | .41 | .010 | 45 | 5.64 | 16 |
| 81/02/28 TO 81/04/05 | .95 | .16 | .45 | .018 | 35 | 5.37 | 17 |
| 81/04/05 TO 81/05/01 | .47 | .04 | .98 | .062 | 25 | 6.48 | 1 |
| 81/05/01 TO 81/05/31 | .53 | .19 | 1.10 | .171 | 20 | 6.20 | 6 |
| 81/05/31 TO 81/06/30 | .35 | .04 | .61 | .031 | 15 | 6.00 | -- |
| 81/06/30 TO 81/07/31 | .29 | .12 | .47 | .050 | 14 | 6.37 | 7 |
| 81/07/31 TO 81/08/31 | .42 | .38 | 1.70 | .163 | 15 | 6.15 | 2 |

# CHEMICAL QUALITY OF PRECIPITATION

## LAKE ONTARIO BASIN

## AT STILLWATER RESERVOIR, NY

LOCATION.--Lat 43°53'28", long 75°02'10", Herkimer County, at National Weather Service station "Stillwater Reservoir", 0.3 mi (0.5 km) northwest of New York State Department of Environmental Conservation forest ranger's cabin, 0.8 mi (1.3 km) southeast of Stillwater Reservoir dam, and 6.8 mi (10.9 km) west of Beaver River.

PERIOD OF RECORD.--October 1977 to current year (monthly composite).

EQUIPMENT.--The sample collector is a straight-sided polyethylene funnel approximately 6.5 in. (165 mm) in diameter which drains into a Teflon* receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The collector is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level and is protected by a windshield.

REMARKS.--Inches of precipitation is that for the National Weather Service station for the reported period of sampling.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

### MONTHLY COMPOSITE

| PERIOD OF COLLECTION | INCHES OF PRECIPITATION | CALCIUM (CA) (MG/L) | MAGNESIUM (MG) (MG/L) | SODIUM (NA) (MG/L) | POTASSIUM (K) (MG/L) | SULFATE (SO4) (MG/L) | CHLORIDE (CL) (MG/L) |
|---|---|---|---|---|---|---|---|
| 80/10/01 TO 80/11/01 | 4.71 | .07 | .02 | .10 | .03 | 1.60 | .09 |
| 80/11/01 TO 80/12/01 | 5.08 | .30 | .05 | .00 | .07 | 2.60 | .05 |
| 80/12/01 TO 80/12/31 | 3.82 | .16 | .03 | .00 | .04 | 2.00 | .24 |
| 80/12/31 TO 81/01/31 | 1.24 | -- | -- | -- | -- | 4.20 | .73 |
| 81/02/01 TO 81/03/01 | 4.11 | .11 | .09 | .11 | .04 | 1.10 | .36 |
| 81/03/01 TO 81/03/31 | 2.73 | .82 | .10 | .10 | .04 | 3.20 | .20 |
| 81/03/31 TO 81/04/30 | 4.80 | .38 | .01 | .17 | .04 | 3.00 | .24 |
| 81/04/30 TO 81/06/01 | 1.94 | .92 | .15 | .13 | .24 | 4.20 | .18 |
| 81/06/01 TO 81/07/06 | 5.69 | .37 | .01 | .11 | .10 | 3.20 | .13 |
| 81/07/06 TO 81/08/10 | 8.36 | .25 | .03 | .07 | .03 | 1.90 | .17 |
| 81/08/10 TO 81/08/31 | 2.22 | .56 | .07 | .14 | .05 | 6.10 | .37 |

| PERIOD OF COLLECTION | NITRITE+ NITRATE AS N (MG/L) | AMMONIA AS N (MG/L) | AMMONIA +ORGANIC NITROGEN AS N (MG/L) | PHOSPHORUS (P) (MG/L) | SPECIFIC CONDUCTANCE (MICRO-(MHOS) | PH (UNITS) | LEAD (PB) (UG/L) |
|---|---|---|---|---|---|---|---|
| 80/10/01 TO 80/11/01 | .36 | .17 | -- | .033 | 18 | 4.41 | 10 |
| 80/11/01 TO 80/12/01 | .84 | .34 | .38 | .000 | 31 | 4.14 | 13 |
| 80/12/01 TO 80/12/31 | .70 | .22 | .21 | .011 | 32 | 4.22 | 11 |
| 80/12/31 TO 81/01/31 | 1.70 | .83 | .84 | .015 | 58 | 4.02 | -- |
| 81/02/01 TO 81/03/01 | .49 | .13 | .28 | .007 | 20 | 4.43 | 10 |
| 81/03/01 TO 81/03/31 | .87 | .68 | .56 | .008 | 30 | 4.37 | 11 |
| 81/03/31 TO 81/04/30 | .60 | .46 | .70 | .001 | 32 | 4.15 | 6 |
| 81/04/30 TO 81/06/01 | .57 | 1.10 | 1.70 | .098 | 21 | 5.20 | 6 |
| 81/06/01 TO 81/07/06 | .45 | .40 | .63 | .006 | 33 | 4.18 | -- |
| 81/07/06 TO 81/08/10 | .28 | .18 | .42 | .010 | 21 | 4.39 | 17 |
| 81/08/10 TO 81/08/31 | .78 | .44 | .84 | .018 | 60 | 3.90 | 9 |

* The use of the brand name in this report is for identification purposes only and does not imply endorsement by the U.S. Geological Survey.

## ST. LAWRENCE RIVER BASIN

## AT LAKE GEORGE, NY

LOCATION.--Lat 43°25'00", long 73°42'03", Warren County, in Lake George Battlefield Park, 0.2 mi (0.3 km) south of the south end of Lake George, 0.6 mi (0.9 km) east of U.S. Highway 9, 0.2 mi south of Village of Lake George and 0.7 mi (1.1 km) east of Interstate Highway 87. Prior to May 28, 1981, at Lat 43°24'58", long 73°42'31", 0.4 mi (0.6 km) west of current location.

PERIOD OF RECORD.--June 1980 to current year - (monthly composite)
June 1980 to current year - (storm event wetfall)
June 1980 to current year - (monthly dustfall)

EQUIPMENT.--The composite sample collector is a straight-sided polyethylene funnel approximately 6.5 in. (165 mm) in diameter which drains into a Teflon* receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The collector is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level.

The wetfall and dustfall sample collector is an Aerochem Metrics Model 101* wet/dry precipitation collector. An automatic sensor detects occurrences of precipitation, activating a motor which removes a cover from the wetfall collection vessel and covers the dustfall collection vessel. When precipitation ceases the cycle is reversed. The sampling vessels are polyethylene and have a collection diameter of 28.6 cm and a capacity of 13 liters. The opening of the collector is approximately 8 ft (2.5 m) above ground level.

REMARKS.--Inches of precipitation obtained from an on-site recording weighing bucket gage.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

### MONTHLY COMPOSITE

| PERIOD OF COLLECTION | INCHES OF PRECIPITATION | CALCIUM (CA) (MG/L) | MAGNESIUM (MG) (MG/L) | SODIUM (NA) (MG/L) | POTASSIUM (K) (MG/L) | SULFATE (SO4) (MG/L) | CHLORIDE (CL) (MG/L) |
|---|---|---|---|---|---|---|---|
| 80/10/07 TO 80/11/05 | -- | .22 | .05 | .25 | .25 | 1.50 | .25 |
| 80/11/05 TO 80/12/02 | 2.82 | .48 | .12 | .02 | .60 | 2.10 | .27 |
| 80/12/02 TO 80/12/31 | 1.60 | 1.30 | .35 | .72 | .39 | -- | -- |
| 80/12/31 TO 81/01/30 | .59 | -- | -- | -- | -- | 3.60 | 3.40 |
| 81/01/30 TO 81/03/02 | 6.75 | .50 | .62 | .59 | .23 | 1.00 | .76 |
| 81/03/02 TO 81/03/31 | .66 | -- | -- | -- | -- | 4.00 | 1.10 |
| 81/03/31 TO 81/05/01 | 2.86 | .88 | .13 | .19 | .12 | 3.90 | .75 |
| 81/05/01 TO 81/06/01 | 3.75 | .70 | .15 | .19 | .28 | 12.00 | .31 |
| 81/06/01 TO 81/06/30 | 2.89 | .89 | .02 | .17 | .24 | 6.00 | .19 |
| 81/06/30 TO 81/07/31 | 3.77 | .55 | .13 | .15 | .06 | 3.10 | .07 |
| 81/07/31 TO 81/08/31 | 3.25 | .63 | .11 | .15 | .07 | 5.50 | .28 |
| 81/08/31 TO 81/09/30 | 6.21 | .30 | .02 | .09 | .04 | 2.60 | .25 |

| PERIOD OF COLLECTION | NITRITE+ NITRATE AS N (MG/L) | AMMONIA AS N (MG/L) | AMMONIA +ORGANIC NITROGEN AS N (MG/L) | PHOSPHORUS (P) (MG/L) | SPECIFIC CONDUCTANCE (MICRO-MHOS) | PH (UNITS) | LEAD (PB) (UG/L) |
|---|---|---|---|---|---|---|---|
| 80/10/07 TO 80/11/05 | .46 | .27 | -- | .085 | 18 | 4.56 | 12 |
| 80/11/05 TO 80/12/02 | .37 | .00 | .13 | .018 | 17 | 4.40 | 10 |
| 80/12/02 TO 80/12/31 | .91 | .06 | .07 | .021 | 25 | 4.55 | -- |
| 80/12/31 TO 81/01/30 | -- | -- | -- | -- | 55 | 4.47 | -- |
| 81/01/30 TO 81/03/02 | .30 | .01 | .10 | .005 | 16 | 4.80 | 8 |
| 81/03/02 TO 81/03/31 | 1.10 | .34 | -- | .022 | 32 | 5.01 | -- |
| 81/03/31 TO 81/05/01 | .63 | .22 | .44 | .029 | 27 | 4.31 | 11 |
| 81/05/01 TO 81/06/01 | .26 | .34 | .51 | .047 | 92 | 3.71 | 10 |
| 81/06/01 TO 81/06/30 | .65 | .56 | 1.20 | .058 | 47 | 4.08 | -- |
| 81/06/30 TO 81/07/31 | .46 | .18 | .25 | .008 | 32 | 4.22 | 26 |
| 81/07/31 TO 81/08/31 | .41 | 1.40 | 4.80 | -- | 46 | 4.10 | 5 |
| 81/08/31 TO 81/09/30 | .23 | .18 | .58 | .045 | 38 | 4.40 | 25 |

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* The use of the brand name in this report is for identification purposes only and does not imply endorsement by the U.S. Geological Survey.

# CHEMICAL QUALITY OF PRECIPITATION

## ST. LAWRENCE RIVER BASIN

## AT LAKE GEORGE, NY--Continued

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

### STORM EVENT WETFALL

| PERIOD OF COLLECTION | INCHES OF PRECIPITATION | CALCIUM (CA) (MG/L) | MAGNESIUM (MG) (MG/L) | SODIUM (NA) (MG/L) | POTASSIUM (K) (MG/L) | SULFATE (SO4) (MG/L) | CHLORIDE (CL) (MG/L) |
|---|---|---|---|---|---|---|---|
| 80/09/26 TO 80/10/24 | 1.09 | .33 | .07 | .14 | .07 | 4.10 | .29 |
| 80/10/24 TO 80/10/26 | 1.45 | .21 | .07 | .28 | .10 | .40 | .40 |
| 80/10/26 TO 80/11/12 | .75 | .94 | .09 | .35 | 1.30 | 3.00 | .59 |
| 80/11/26 TO 80/12/01 | .80 | .60 | .41 | .02 | .05 | 1.70 | .30 |
| 80/12/01 TO 80/12/03 | .48 | .33 | .04 | 1.10 | .87 | 2.50 | 1.70 |
| 80/12/03 TO 80/12/17 | .77 | .66 | .17 | .34 | .05 | 1.30 | .44 |
| 80/12/17 TO 81/01/19 | .74 | .64 | .04 | 1.50 | .06 | 1.90 | 2.30 |
| 81/01/19 TO 81/02/03 | 2.39 | .25 | .07 | .43 | .09 | .40 | .68 |
| 81/02/03 TO 81/02/10 | .43 | .04 | .05 | .47 | .24 | .60 | .67 |
| 81/02/10 TO 81/02/12 | 1.26 | .12 | .26 | 1.40 | .09 | 1.50 | 2.10 |
| 81/02/12 TO 81/02/23 | 1.10 | .10 | .22 | .23 | .02 | .40 | .27 |
| 81/02/23 TO 81/02/26 | 1.66 | .04 | .06 | .10 | .01 | .70 | .12 |
| 81/03/30 TO 81/04/02 | 1.24 | .44 | .05 | .14 | .07 | 1.70 | .18 |
| 81/04/02 TO 81/04/15 | 1.02 | -- | -- | -- | -- | 6.50 | .33 |
| 81/04/15 TO 81/04/21 | .57 | -- | -- | -- | -- | 5.00 | .15 |
| 81/04/21 TO 81/05/12 | 1.74 | .16 | .04 | .13 | .05 | 1.60 | .22 |
| 81/05/12 TO 81/05/13 | 1.20 | .27 | .16 | .20 | .10 | 1.90 | .35 |
| 81/05/13 TO 81/06/01 | .74 | .56 | .06 | .32 | .09 | 4.70 | .40 |
| 81/06/01 TO 81/06/09 | .79 | .15 | .01 | .12 | .08 | 3.20 | .15 |
| 81/06/15 TO 81/06/17 | .71 | .11 | .01 | .33 | .13 | 5.40 | .36 |
| 81/06/17 TO 81/06/22 | .56 | .14 | .01 | .16 | .06 | 7.70 | .26 |
| 81/06/22 TO 81/07/03 | .95 | .02 | .01 | .21 | .10 | 1.20 | .19 |
| 81/07/03 TO 81/07/15 | .43 | .32 | .06 | .19 | .12 | 1.40 | .19 |
| 81/07/21 TO 81/07/27 | .88 | .10 | .03 | .21 | .09 | 4.20 | .33 |
| 81/07/27 TO 81/07/29 | .93 | -- | -- | -- | -- | 2.00 | .23 |
| 81/07/29 TO 81/08/12 | 1.17 | .04 | .01 | .08 | .03 | 5.90 | .21 |
| 81/08/12 TO 81/08/16 | 1.55 | .09 | .01 | .15 | .04 | 4.70 | .11 |
| 81/08/16 TO 81/09/08 | .87 | .14 | .01 | .20 | .05 | 2.40 | .04 |
| 81/09/08 TO 81/09/23 | 2.90 | .23 | .01 | .07 | .04 | 2.40 | .03 |

| PERIOD OF COLLECTION | NITRITE+ NITRATE AS N (MG/L) | AMMONIA AS N (MG/L) | AMMONIA +ORGANIC NITROGEN AS N (MG/L) | PHOSPHORUS (P) (MG/L) | SPECIFIC CONDUCTANCE (MICROMHOS) | PH (UNITS) | LEAD (PB) (UG/L) |
|---|---|---|---|---|---|---|---|
| 80/09/26 TO 80/10/24 | .58 | .17 | .24 | .000 | 40 | 4.07 | 14 |
| 80/10/24 TO 80/10/26 | .13 | .00 | .11 | .000 | 6 | 5.37 | 12 |
| 80/10/26 TO 80/11/12 | .78 | .48 | -- | -- | 22 | 5.58 | 7 |
| 80/11/26 TO 80/12/01 | .27 | .03 | .17 | .000 | 13 | 4.51 | 9 |
| 80/12/01 TO 80/12/03 | .67 | .28 | .40 | .014 | 22 | 4.70 | 20 |
| 80/12/03 TO 80/12/17 | .75 | .10 | .26 | .014 | 25 | 4.34 | 22 |
| 80/12/17 TO 81/01/19 | 1.40 | .17 | .28 | .002 | 38 | 4.42 | -- |
| 81/01/19 TO 81/02/03 | .27 | .03 | .17 | .003 | 16 | 4.64 | 0 |
| 81/02/03 TO 81/02/10 | .70 | .13 | .22 | .007 | 23 | 4.48 | -- |
| 81/02/10 TO 81/02/12 | .29 | .07 | .14 | .003 | 31 | 4.41 | 10 |
| 81/02/12 TO 81/02/23 | .16 | .04 | .10 | .005 | 9 | 4.87 | 12 |
| 81/02/23 TO 81/02/26 | .14 | .02 | .10 | .004 | 8 | 4.75 | 6 |
| 81/03/30 TO 81/04/02 | .51 | .27 | .23 | .004 | 30 | 4.22 | 13 |
| 81/04/02 TO 81/04/15 | .77 | .39 | 1.00 | .047 | 49 | 4.11 | -- |
| 81/04/15 TO 81/04/21 | .73 | .49 | .91 | .024 | 43 | 4.04 | -- |
| 81/04/21 TO 81/05/12 | .32 | .21 | .50 | .042 | 15 | 4.62 | 4 |
| 81/05/12 TO 81/05/13 | .19 | .15 | .48 | .019 | 19 | 4.47 | 9 |
| 81/05/13 TO 81/06/01 | .48 | .33 | .44 | .001 | 47 | 4.06 | 11 |
| 81/06/01 TO 81/06/09 | .54 | .39 | .71 | .004 | 28 | 4.17 | -- |
| 81/06/15 TO 81/06/17 | .45 | .39 | .64 | .002 | 48 | 3.99 | -- |
| 81/06/17 TO 81/06/22 | .86 | .37 | .60 | .003 | 80 | 3.72 | -- |
| 81/06/22 TO 81/07/03 | .19 | .09 | .40 | .001 | 15 | 4.53 | -- |
| 81/07/03 TO 81/07/15 | .39 | .18 | .36 | .006 | 19 | 4.45 | -- |
| 81/07/21 TO 81/07/27 | .49 | .30 | .26 | .001 | 51 | 3.95 | 24 |
| 81/07/27 TO 81/07/29 | .50 | .15 | -- | -- | 35 | 4.14 | -- |
| 81/07/29 TO 81/08/12 | .54 | .31 | .53 | .002 | 55 | 3.86 | 9 |
| 81/08/12 TO 81/08/16 | .70 | .56 | .73 | .005 | 52 | 3.93 | 17 |
| 81/08/16 TO 81/09/08 | 1.30 | .20 | .55 | .013 | 39 | 4.05 | -- |
| 81/09/08 TO 81/09/23 | .71 | .34 | 1.00 | .008 | 47 | 4.30 | -- |

## ST. LAWRENCE RIVER BASIN

## AT LAKE GEORGE, NY--Continued

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

### MONTHLY DUSTFALL

| PERIOD OF COLLECTION | INCHES OF PRECIPITATION | CALCIUM (CA) (MG/L) | MAGNESIUM (MG) (MG/L) | SODIUM (NA) (MG/L) | POTASSIUM (K) (MG/L) | SULFATE (SO4) (MG/L) | CHLORIDE (CL) (MG/L) |
|---|---|---|---|---|---|---|---|
| 80/09/24 TO 80/11/26 | 7.03 | 1.50 | .46 | .32 | 1.00 | 3.30 | .30 |
| 80/12/01 TO 80/12/31 | 1.60 | .95 | .27 | 1.30 | .24 | 1.80 | 1.80 |
| 80/12/31 TO 81/01/30 | .59 | .74 | .08 | 1.50 | .11 | .80 | 2.20 |
| 81/01/30 TO 81/03/02 | 6.75 | .20 | .14 | .49 | .03 | .60 | .44 |
| 81/03/02 TO 81/03/31 | .66 | 1.30 | .43 | .55 | .15 | 2.30 | .75 |
| 81/03/31 TO 81/05/01 | 2.86 | 2.10 | .42 | .32 | .24 | 3.10 | .50 |
| 81/05/01 TO 81/06/01 | 3.75 | 1.80 | .49 | .21 | .58 | 3.10 | .28 |
| 81/06/01 TO 81/06/30 | 2.89 | 1.90 | .24 | .18 | .67 | 4.30 | .17 |
| 81/06/30 TO 81/07/31 | 3.77 | 1.80 | .88 | .35 | 1.10 | 12.00 | -- |
| 81/07/31 TO 81/08/31 | 3.25 | 1.70 | .64 | .16 | 1.30 | 3.80 | .33 |
| 81/08/31 TO 81/09/30 | 6.21 | 1.20 | .32 | .17 | .13 | 2.70 | .00 |

| PERIOD OF COLLECTION | NITRITE+ NITRATE AS N (MG/L) | AMMONIA AS N (MG/L) | AMMONIA +ORGANIC NITROGEN AS N (MG/L) | PHOSPHORUS (P) (MG/L) | SPECIFIC CONDUCTANCE (MICRO-(MHOS) | PH (UNITS) | LEAD (PB) (UG/L) |
|---|---|---|---|---|---|---|---|
| 80/09/24 TO 80/11/26 | .55 | .43 | .40 | .083 | 26 | 5.08 | 20 |
| 80/12/01 TO 80/12/31 | .55 | .06 | -- | -- | 21 | 5.13 | 12 |
| 80/12/31 TO 81/01/30 | .75 | .09 | .22 | .010 | 23 | 4.97 | 0 |
| 81/01/30 TO 81/03/02 | .22 | .04 | .16 | .011 | 7 | 5.81 | 11 |
| 81/03/02 TO 81/03/31 | .36 | .05 | .10 | .018 | 12 | 6.22 | 18 |
| 81/03/31 TO 81/05/01 | .50 | .10 | .45 | .041 | 20 | 5.87 | 2 |
| 81/05/01 TO 81/06/01 | .36 | .21 | 1.20 | .130 | 15 | 6.63 | 3 |
| 81/06/01 TO 81/06/30 | .29 | .15 | .83 | .068 | 19 | 5.31 | -- |
| 81/06/30 TO 81/07/31 | .11 | 1.20 | 1.80 | -- | 33 | 7.06 | 11 |
| 81/07/31 TO 81/08/31 | -- | -- | -- | .001 | 28 | 6.75 | 1 |
| 81/08/31 TO 81/09/30 | .54 | .25 | .80 | .001 | 15 | 5.54 | -- |

## ST. LAWRENCE RIVER BASIN

## NEAR CANTON, NY

LOCATION.--Lat 44°34'40", long 75°06'40", St. Lawrence County, at National Weather Service station "Canton 4SE," on the Canton State University Farm on State Highway 68, 2.5 mi (4.0 km) southeast of U.S. Highway 11 and Canton.

PERIOD OF RECORD.--Water years 1966 to current year (monthly composite).

EQUIPMENT.--The sample collector is a straight-sided polyethylene funnel approximately 6.5 in. (165 mm) in diameter which drains into a Teflon* receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The collector is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level and is protected by a windshield.

REMARKS.--Inches of precipitation is that for the National Weather Service station for the reported period of sampling.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

### MONTHLY COMPOSITE

| PERIOD OF COLLECTION | INCHES OF PRECIPI-TATION | CAL-CIUM (CA) (MG/L) | MAGNE-SIUM (MG) (MG/L) | SODIUM (NA) (MG/L) | POTAS-SIUM (K) (MG/L) | SULFATE (SO4) (MG/L) | CHLO-RIDE (CL) (MG/L) |
|---|---|---|---|---|---|---|---|
| 80/10/01 TO 80/11/03 | 2.71 | .53 | .13 | .15 | .21 | 1.20 | .63 |
| 80/11/03 TO 80/12/01 | 4.23 | .81 | .28 | .08 | .10 | 2.20 | .10 |
| 80/12/01 TO 80/12/31 | 2.82 | .09 | .01 | .11 | .06 | 1.90 | .45 |
| 80/12/31 TO 81/02/02 | 1.04 | 1.20 | .57 | 2.20 | .14 | 2.50 | 3.60 |
| 81/02/02 TO 81/03/02 | 2.13 | 1.00 | .58 | .53 | .04 | 1.60 | .68 |
| 81/03/02 TO 81/04/01 | 1.10 | 1.80 | .77 | .57 | .05 | 5.10 | .73 |
| 81/04/01 TO 81/05/01 | 2.92 | 1.50 | .48 | .13 | .12 | 3.70 | .12 |
| 81/05/01 TO 81/06/01 | 2.90 | 1.10 | .36 | .14 | .14 | 4.30 | .34 |
| 81/06/01 TO 81/07/01 | 2.79 | 1.00 | .07 | .11 | .17 | 3.70 | .30 |
| 81/07/01 TO 81/08/03 | 2.05 | .85 | .26 | .14 | .18 | 2.20 | .46 |
| 81/08/03 TO 81/09/01 | 5.28 | .22 | .02 | .11 | .08 | 4.10 | .31 |
| 81/09/01 TO 81/10/01 | 5.88 | .37 | .07 | .07 | .05 | 2.00 | .36 |

| PERIOD OF COLLECTION | NIT-RITE+ NIT-RATE AS N (MG/L) | AMMONIA AS N (MG/L) | AMMONIA +ORGANIC NITROGEN AS N (MG/L) | PHOS-PHORUS (P) (MG/L) | SPE-CIFIC CON-DUCTANCE (MICRO-(MHOS) | PH (UNITS) | LEAD (PB) (UG/L) |
|---|---|---|---|---|---|---|---|
| 80/10/01 TO 80/11/03 | .42 | .15 | .45 | .011 | 17 | 4.76 | 9 |
| 80/11/03 TO 80/12/01 | .77 | .38 | .42 | .006 | 24 | 4.52 | 8 |
| 80/12/01 TO 80/12/31 | .57 | .18 | .26 | .011 | 20 | 4.51 | 6 |
| 80/12/31 TO 81/02/02 | 1.40 | .56 | .59 | .033 | 38 | 5.19 | -- |
| 81/02/02 TO 81/03/02 | .74 | .21 | .32 | .008 | 17 | 5.45 | 4 |
| 81/03/02 TO 81/04/01 | 1.30 | .97 | 1.10 | .016 | 31 | 5.54 | -- |
| 81/04/01 TO 81/05/01 | .80 | .55 | .65 | .011 | 27 | 4.75 | 5 |
| 81/05/01 TO 81/06/01 | .51 | .51 | .84 | .014 | 25 | 4.60 | 12 |
| 81/06/01 TO 81/07/01 | .48 | .36 | .59 | .015 | 30 | 4.25 | 18 |
| 81/07/01 TO 81/08/03 | .30 | .25 | .33 | .043 | 25 | 4.49 | 25 |
| 81/08/03 TO 81/09/01 | .47 | .14 | .32 | .027 | 45 | 4.04 | 29 |
| 81/09/01 TO 81/10/01 | .38 | .25 | .57 | .002 | 24 | 4.34 | 30 |

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* The use of the brand name in this report is for identification purposes only and does not imply endorsement by the U.S. Geological Survey.

## ST. LAWRENCE RIVER BASIN

## NEAR CHAZY, NY

LOCATION.--Lat 44°53'15", long 73°28'01", Clinton County, at Cornell University meteorological station at William H. Miner Agriculture Research Institute, 0.1 mi (0.2 km) southeast of intersection of State Highway 191 and Ridge Road, and 1.4 mi (2.2 km) West of Chazy.

PERIOD OF RECORD.--Water years 1975 to current year (monthly composite)
October 1980 to September 1981 (storm event wetfall)
September 1980 to September 1981 (monthly dustfall)

EQUIPMENT.--The composite sample collector is a straight-sided polyethylene funnel approximately 6.5 in. (165 mm) in diameter which drains into a Teflon* receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The collector is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level.

The wetfall and dustfall sample collector is an Aerochem Metrics Model 101* wet/dry precipitation collector. An automatic sensor detects occurrences of precipitation, activating a motor which removes a cover from the wetfall collection vessel and covers the dustfall collection vessel. When precipitation ceases the cycle is reversed. The sampling vessels are polyethylene and have a collection diameter of 28.6 cm and a capacity of 13 liters. The opening of the collector is approximately 8 ft (2.5 m) above ground level.

REMARKS.--Inches of precipitation obtained from an on-site recording weighing bucket gage.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

### MONTHLY COMPOSITE

| PERIOD OF COLLECTION | INCHES OF PRECIPITATION | CALCIUM (CA) (MG/L) | MAGNESIUM (MG) (MG/L) | SODIUM (NA) (MG/L) | POTASSIUM (K) (MG/L) | SULFATE (SO4) (MG/L) | CHLORIDE (CL) (MG/L) |
|---|---|---|---|---|---|---|---|
| 80/10/01 TO 80/11/01 | 2.03 | .20 | .02 | .16 | .06 | 1.70 | .21 |
| 80/11/01 TO 80/12/01 | 2.08 | .43 | .07 | .05 | .05 | 2.20 | .16 |
| 80/12/01 TO 81/01/05 | 1.32 | 1.20 | .17 | 1.10 | .07 | 2.00 | .61 |
| 81/01/05 TO 81/02/01 | .35 | — | — | — | — | 4.40 | 1.30 |
| 81/02/01 TO 81/03/03 | 2.76 | — | — | — | — | 1.50 | .51 |
| 81/03/03 TO 81/04/01 | .81 | — | — | — | — | 3.90 | .50 |
| 81/04/01 TO 81/05/04 | 1.74 | 1.10 | .06 | .16 | .07 | 4.20 | .08 |
| 81/05/04 TO 81/07/16 | 6.19 | .50 | .11 | .35 | .14 | 3.60 | .19 |
| 81/07/16 TO 81/07/31 | 2.39 | .43 | .06 | .10 | .04 | 2.00 | .18 |
| 81/07/31 TO 81/08/18 | 5.35 | .10 | .01 | .08 | .08 | 4.40 | .06 |
| 81/08/18 TO 81/09/01 | .35 | .34 | .04 | .07 | .03 | 1.90 | .16 |
| 81/09/01 TO 81/09/25 | 5.11 | .29 | .01 | .07 | .12 | 2.30 | .31 |

| PERIOD OF COLLECTION | NITRITE+NITRATE AS N (MG/L) | AMMONIA AS N (MG/L) | AMMONIA +ORGANIC NITROGEN AS N (MG/L) | PHOSPHORUS (P) (MG/L) | SPECIFIC CONDUCTANCE (MICROMHOS) | PH (UNITS) | LEAD (PB) (UG/L) |
|---|---|---|---|---|---|---|---|
| 80/10/01 TO 80/11/01 | .38 | .24 | — | .020 | 21 | 4.36 | 9 |
| 80/11/01 TO 80/12/01 | .68 | .39 | .34 | .004 | 26 | 4.29 | 13 |
| 80/12/01 TO 81/01/05 | .98 | .30 | .60 | .018 | 28 | 4.54 | — |
| 81/01/05 TO 81/02/01 | — | — | — | — | 42 | 4.51 | — |
| 81/02/01 TO 81/03/03 | .91 | .18 | — | .018 | 27 | 4.47 | — |
| 81/03/03 TO 81/04/01 | .99 | .63 | — | .020 | 29 | 4.71 | — |
| 81/04/01 TO 81/05/04 | .69 | .55 | .76 | .012 | 25 | 4.63 | — |
| 81/05/04 TO 81/07/16 | .48 | .67 | .71 | .044 | 26 | 4.40 | 23 |
| 81/07/16 TO 81/07/31 | .26 | .10 | .12 | .003 | 20 | 4.38 | 20 |
| 81/07/31 TO 81/08/18 | .95 | .71 | 1.10 | .025 | 36 | 4.13 | 12 |
| 81/08/18 TO 81/09/01 | 1.40 | .23 | .54 | .002 | 48 | 4.00 | 3 |
| 81/09/01 TO 81/09/25 | .15 | .38 | .64 | .077 | 11 | 5.00 | 5 |

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* The use of the brand name in this report is for identification purposes only and does not imply endorsement by the U.S. Geological Survey.

# CHEMICAL QUALITY OF PRECIPITATION

## ST. LAWRENCE RIVER BASIN

## NEAR CHAZY, NY--Continued

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

### STORM EVENT WETFALL

| PERIOD OF COLLECTION | INCHES OF PRECIPI- TATION | CAL- CIUM (CA) (MG/L) | MAGNE- SIUM (MG) (MG/L) | SODIUM (NA) (MG/L) | POTAS- SIUM (K) (MG/L) | SULFATE (SO4) (MG/L) | CHLO- RIDE (CL) (MG/L) |
|---|---|---|---|---|---|---|---|
| 80/09/29 TO 80/10/06 | 1.01 | .42 | .02 | .22 | .50 | 2.60 | .45 |
| 80/10/20 TO 80/10/27 | .82 | .16 | .02 | .23 | .04 | 1.10 | .17 |
| 80/11/04 TO 80/11/10 | .90 | .04 | .02 | .15 | .05 | 1.50 | .18 |
| 80/11/10 TO 80/11/24 | .70 | .24 | .05 | .08 | .09 | 1.30 | .15 |
| 80/11/24 TO 80/12/01 | .51 | .16 | .04 | .05 | .07 | 1.00 | .07 |
| 80/12/01 TO 81/01/05 | 1.22 | .17 | .02 | .50 | .07 | 1.10 | .23 |
| 81/01/05 TO 81/02/03 | .61 | .31 | .12 | .01 | .02 | .40 | .16 |
| 81/02/03 TO 81/02/13 | .48 | .03 | .00 | .20 | .02 | .60 | .00 |
| 81/02/13 TO 81/03/03 | 1.69 | .07 | .08 | .10 | .03 | .30 | .00 |
| 81/03/03 TO 81/04/01 | .82 | .46 | .03 | .25 | .09 | 2.20 | .49 |
| 81/04/01 TO 81/04/06 | .57 | .37 | .02 | .10 | .03 | 2.30 | .11 |
| 81/04/06 TO 81/05/04 | 1.11 | .29 | .01 | .10 | .05 | 2.60 | .31 |
| 81/05/04 TO 81/05/13 | 1.00 | .12 | .12 | .10 | .04 | 3.10 | .20 |
| 81/05/13 TO 81/05/29 | .45 | .68 | .11 | .17 | .07 | 7.00 | .26 |
| 81/05/29 TO 81/07/16 | 4.52 | .23 | .06 | .14 | .20 | 1.20 | .25 |
| 81/07/16 TO 81/07/27 | 1.35 | .19 | .01 | .03 | .14 | 1.30 | .01 |
| 81/07/27 TO 81/07/31 | 1.00 | .12 | .07 | .14 | .04 | 1.10 | .01 |
| 81/07/31 TO 81/08/07 | 1.95 | .22 | .03 | .09 | .03 | 5.20 | .12 |
| 81/08/07 TO 81/08/18 | 3.40 | .06 | .01 | .08 | .01 | 3.80 | .02 |
| 81/09/01 TO 81/09/11 | 2.40 | .06 | .01 | .22 | .05 | .90 | .07 |
| 81/09/11 TO 81/09/25 | 2.71 | .09 | .01 | .08 | .02 | .70 | .00 |
| 81/09/25 TO 81/10/01 | .36 | .32 | .02 | .10 | .06 | 3.70 | .11 |

| PERIOD OF COLLECTION | NIT- RITE+ NIT- RATE AS N (MG/L) | AMMONIA AS N (MG/L) | AMMONIA +ORGANIC NITROGEN AS N (MG/L) | PHOS- PHORUS (P) (MG/L) | SPE- CIFIC CON- DUCTANCE (MICRO- (MHOS) | PH (UNITS) | LEAD (PB) (UG/L) |
|---|---|---|---|---|---|---|---|
| 80/09/29 TO 80/10/06 | .40 | 1.00 | 2.20 | .069 | 15 | 5.85 | 6 |
| 80/10/20 TO 80/10/27 | .32 | .19 | — | .011 | 13 | 4.65 | 11 |
| 80/11/04 TO 80/11/10 | .80 | .42 | .47 | .007 | 27 | 4.20 | 12 |
| 80/11/10 TO 80/11/24 | .57 | .14 | .24 | .000 | 28 | 4.18 | 5 |
| 80/11/24 TO 80/12/01 | .19 | .01 | .27 | .001 | 14 | 4.51 | 3 |
| 80/12/01 TO 81/01/05 | .58 | .08 | .20 | .013 | 26 | 4.24 | 6 |
| 81/01/05 TO 81/02/03 | .23 | .08 | .10 | .002 | 16 | 4.50 | 6 |
| 81/02/03 TO 81/02/13 | .62 | .10 | .14 | .041 | 23 | 4.31 | — |
| 81/02/13 TO 81/03/03 | .25 | .08 | .13 | .002 | 13 | 4.62 | 7 |
| 81/03/03 TO 81/04/01 | .93 | .43 | .40 | .005 | 41 | 4.10 | — |
| 81/04/01 TO 81/04/06 | .43 | .42 | .82 | .009 | 40 | 4.23 | 20 |
| 81/04/06 TO 81/05/04 | .57 | .32 | .59 | .010 | 39 | 4.13 | 7 |
| 81/05/04 TO 81/05/13 | .31 | .20 | .45 | .014 | 22 | 4.30 | 5 |
| 81/05/13 TO 81/05/29 | .64 | .67 | .75 | .007 | 60 | 3.99 | 11 |
| 81/05/29 TO 81/07/16 | .23 | .38 | .58 | .059 | 11 | 5.02 | 17 |
| 81/07/16 TO 81/07/27 | .48 | .10 | .20 | .001 | 33 | 4.12 | 16 |
| 81/07/27 TO 81/07/31 | .51 | .15 | .12 | .014 | 23 | 4.28 | 19 |
| 81/07/31 TO 81/08/07 | .71 | .40 | .39 | .003 | 57 | 3.85 | 25 |
| 81/08/07 TO 81/08/18 | .36 | .32 | .56 | .011 | 39 | 4.04 | 14 |
| 81/09/01 TO 81/09/11 | — | — | — | — | 11 | 4.70 | — |
| 81/09/11 TO 81/09/25 | .18 | .16 | .38 | .005 | 16 | 5.50 | — |
| 81/09/25 TO 81/10/01 | .68 | .47 | .96 | .002 | 62 | 4.15 | — |

## ST. LAWRENCE RIVER BASIN

## NEAR CHAZY, NY--Continued

### CHEMICAL ANALYSES, SEPTEMBER 1980 TO SEPTEMBER 1981

### MONTHLY DUSTFALL

| PERIOD OF COLLECTION | INCHES OF PRECIPITATION | CALCIUM (CA) (MG/L) | MAGNESIUM (MG) (MG/L) | SODIUM (NA) (MG/L) | POTASSIUM (K) (MG/L) | SULFATE (SO4) (MG/L) | CHLORIDE (CL) (MG/L) |
|---|---|---|---|---|---|---|---|
| 80/09/19 TO 80/10/01 | -- | 1.30 | .03 | .22 | .05 | 1.50 | .20 |
| 80/10/01 TO 80/11/01 | 2.03 | .58 | .05 | .18 | .08 | .90 | .09 |
| 80/11/01 TO 80/12/01 | 2.08 | -- | -- | -- | -- | 1.20 | .03 |
| 80/12/01 TO 81/01/05 | 1.32 | .23 | .01 | .00 | .03 | .10 | .13 |
| 81/07/16 TO 81/07/31 | 2.39 | .29 | .01 | .15 | .14 | 1.30 | .41 |
| 81/07/31 TO 81/09/01 | 5.70 | 1.10 | .36 | .29 | -- | 6.90 | .49 |
| 81/09/01 TO 81/10/01 | 5.60 | .83 | .11 | .13 | .12 | 2.20 | .00 |

| PERIOD OF COLLECTION | NITRITE+NITRATE AS N (MG/L) | AMMONIA AS N (MG/L) | AMMONIA +ORGANIC NITROGEN AS N (MG/L) | PHOSPHORUS (P) (MG/L) | SPECIFIC CONDUCTANCE (MICRO-(MHOS) | PH (UNITS) | LEAD (PB) (UG/L) |
|---|---|---|---|---|---|---|---|
| 80/09/19 TO 80/10/01 | .27 | .11 | .16 | .014 | 8 | 6.29 | 20 |
| 80/10/01 TO 80/11/01 | .30 | .11 | .36 | .014 | 10 | 5.75 | 6 |
| 80/11/01 TO 80/12/01 | .30 | .08 | .28 | .001 | 11 | 5.28 | 20 |
| 80/12/01 TO 81/01/05 | .00 | .00 | .14 | .007 | 4 | 5.60 | 3 |
| 81/07/16 TO 81/07/31 | .20 | .04 | .44 | .036 | 7 | 5.43 | 13 |
| 81/07/31 TO 81/09/01 | .22 | .87 | -- | -- | 20 | 6.06 | 2 |
| 81/09/01 TO 81/10/01 | .18 | .29 | .67 | .012 | 12 | 5.38 | -- |

## ALBANY COUNTY

424114073495402. Local number, A 636.

LOCATION.--Lat 42°41'14", long 73°49'54", Hydrologic Unit 02020006, Fuller Road, Albany.
Owner: State University of New York at Albany.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in. (0.15 m), depth 21 ft (6.4 m), cased to 22 ft (6.7 m), 2-in. (0.05-m) jet point (60-gauze screen 22 ft or 6.7 m to 24 ft or 7.3 m). Well gravel packed from original depth of 26 ft (7.9 m).

DATUM.--Altitude of land-surface datum is 260 ft (79 m), from topographic map. Measuring point: Top of casing, 2.40 ft (0.732 m) above land-surface datum.

REMARKS.--Well was drilled May 1974 as a replacement for 424114073495401 (local number A 635), located 35 ft (10.7 m) north, which has a period of record from November 1965 to May 1974 (unpublished).

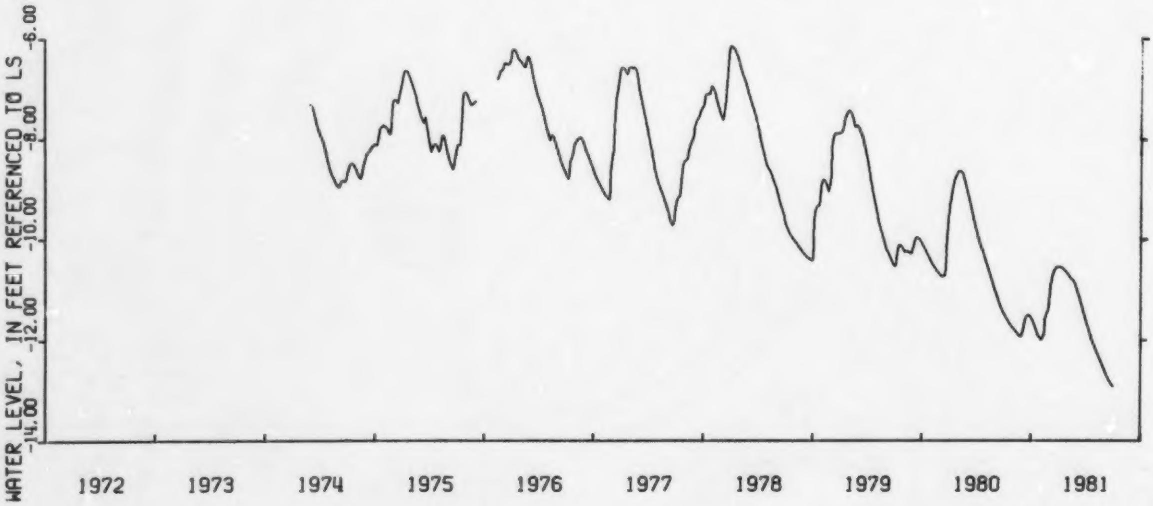
PERIOD OF RECORD.--May 1974 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.12 ft (1.87 m) below land-surface datum, April 12, 13, 1978; lowest, 12.93 ft (3.94 m) below land-surface datum, Sept. 30, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 11.47 | 11.77 | 11.84 | 11.57 | 12.00 | 11.18 | 10.54 | 10.66 | 10.99 | 11.62 | 12.18 | 12.62 |
| 2 | 11.48 | 11.77 | 11.81 | 11.58 | 12.00 | 11.11 | 10.54 | 10.67 | 11.01 | 11.64 | 12.19 | 12.63 |
| 3 | 11.50 | 11.78 | 11.78 | 11.59 | 11.99 | 11.05 | 10.54 | 10.68 | 11.03 | 11.67 | 12.21 | 12.64 |
| 4 | 11.50 | 11.79 | 11.75 | 11.61 | 11.98 | 11.00 | 10.54 | 10.69 | 11.05 | 11.69 | 12.22 | 12.66 |
| 5 | 11.51 | 11.79 | 11.72 | 11.62 | 11.96 | 10.94 | 10.54 | 10.70 | 11.06 | 11.70 | 12.23 | 12.67 |
| 6 | 11.53 | 11.80 | 11.69 | 11.64 | 11.94 | 10.90 | 10.54 | 10.71 | 11.08 | 11.72 | 12.25 | 12.68 |
| 7 | 11.54 | 11.81 | 11.66 | 11.65 | 11.92 | 10.86 | 10.54 | 10.72 | 11.10 | 11.74 | 12.26 | 12.70 |
| 8 | 11.55 | 11.81 | 11.64 | 11.67 | 11.90 | 10.83 | 10.54 | 10.73 | 11.12 | 11.75 | 12.28 | 12.71 |
| 9 | 11.56 | 11.82 | 11.61 | 11.68 | 11.89 | 10.80 | 10.54 | 10.74 | 11.14 | 11.77 | 12.29 | 12.72 |
| 10 | 11.57 | 11.83 | 11.59 | 11.71 | 11.89 | 10.77 | 10.55 | 10.75 | 11.16 | 11.79 | 12.30 | 12.73 |
| 11 | 11.58 | 11.84 | 11.57 | 11.72 | 11.88 | 10.74 | 10.55 | 10.76 | 11.18 | 11.81 | 12.32 | 12.75 |
| 12 | 11.59 | 11.84 | 11.55 | 11.74 | 11.79 | 10.72 | 10.55 | 10.77 | 11.20 | 11.83 | 12.33 | 12.76 |
| 13 | 11.60 | 11.85 | 11.54 | 11.76 | 11.67 | 10.70 | 10.56 | 10.78 | 11.23 | 11.86 | 12.34 | 12.77 |
| 14 | 11.61 | 11.86 | 11.52 | 11.77 | 11.59 | 10.68 | 10.56 | 10.78 | 11.25 | 11.88 | 12.36 | 12.78 |
| 15 | 11.62 | 11.87 | 11.51 | 11.79 | 11.55 | 10.66 | 10.57 | 10.78 | 11.27 | 11.90 | 12.37 | 12.79 |
| 16 | 11.63 | 11.87 | 11.51 | 11.81 | 11.52 | 10.64 | 10.57 | 10.79 | 11.29 | 11.92 | 12.38 | 12.80 |
| 17 | 11.64 | 11.88 | 11.50 | 11.82 | 11.50 | 10.62 | 10.58 | 10.79 | 11.31 | 11.94 | 12.40 | 12.81 |
| 18 | 11.65 | 11.89 | 11.49 | 11.84 | 11.48 | 10.61 | 10.58 | 10.80 | 11.34 | 11.96 | 12.41 | 12.82 |
| 19 | 11.66 | 11.90 | 11.49 | 11.85 | 11.47 | 10.60 | 10.59 | 10.80 | 11.36 | 11.98 | 12.42 | 12.83 |
| 20 | 11.67 | 11.90 | 11.49 | 11.87 | 11.46 | 10.59 | 10.59 | 10.81 | 11.38 | 12.00 | 12.44 | 12.84 |
| 21 | 11.68 | 11.91 | 11.49 | 11.88 | 11.45 | 10.58 | 10.60 | 10.82 | 11.41 | 12.02 | 12.45 | 12.85 |
| 22 | 11.69 | 11.92 | 11.49 | 11.89 | 11.44 | 10.57 | 10.61 | 10.82 | 11.43 | 12.03 | 12.47 | 12.86 |
| 23 | 11.70 | 11.92 | 11.49 | 11.91 | 11.43 | 10.56 | 10.62 | 10.83 | 11.45 | 12.04 | 12.48 | 12.87 |
| 24 | 11.71 | 11.93 | 11.50 | 11.92 | 11.41 | 10.56 | 10.62 | 10.85 | 11.47 | 12.06 | 12.50 | 12.87 |
| 25 | 11.72 | 11.93 | 11.50 | 11.93 | 11.39 | 10.55 | 10.62 | 10.86 | 11.49 | 12.07 | 12.51 | 12.88 |
| 26 | 11.73 | 11.93 | 11.51 | 11.94 | 11.36 | 10.55 | 10.63 | 10.87 | 11.51 | 12.09 | 12.53 | 12.89 |
| 27 | 11.73 | 11.92 | 11.52 | 11.95 | 11.32 | 10.54 | 10.64 | 10.89 | 11.53 | 12.10 | 12.54 | 12.90 |
| 28 | 11.74 | 11.91 | 11.53 | 11.96 | 11.25 | 10.54 | 10.64 | 10.91 | 11.55 | 12.11 | 12.56 | 12.91 |
| 29 | 11.75 | 11.89 | 11.54 | 11.97 | --- | 10.54 | 10.65 | 10.93 | 11.57 | 12.13 | 12.57 | 12.91 |
| 30 | 11.75 | 11.86 | 11.54 | 11.98 | --- | 10.54 | 10.66 | 10.95 | 11.60 | 12.15 | 12.59 | 12.92 |
| 31 | 11.76 | --- | 11.56 | 11.99 | --- | 10.53 | --- | 10.97 | --- | 12.16 | 12.60 | --- |

WTR YEAR 1981 HIGHEST 10.53 Mar. 31, 1981 LOWEST 12.93 Sept. 30, 1981



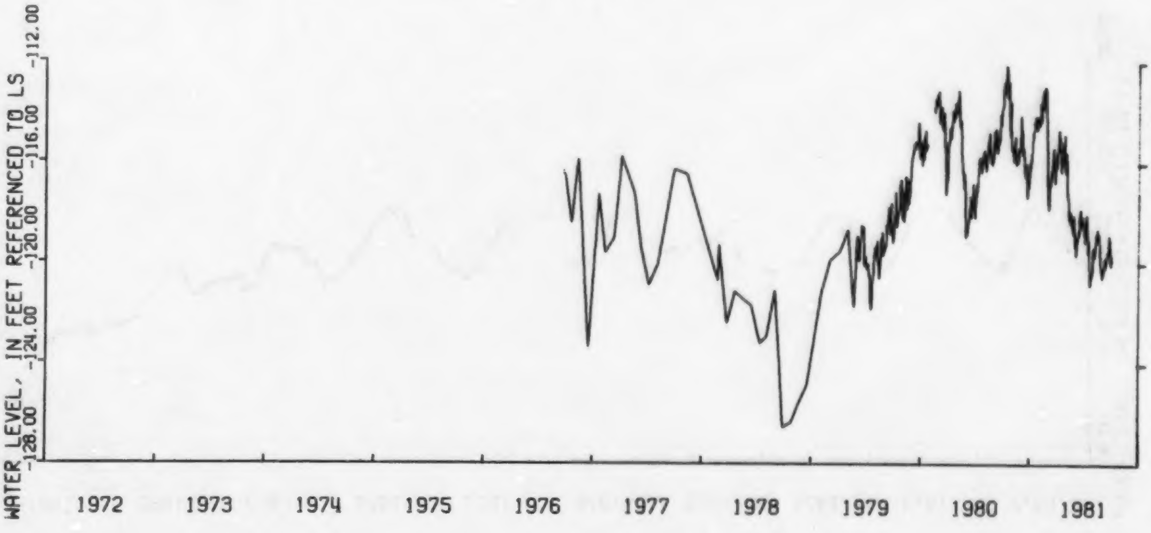
## ALBANY COUNTY

424044073535101. Local number, A 637.
LOCATION.--Lat 42°40'44", long 73°53'51", Hydrologic Unit 02020006, Dr. Shaw Road, Guilderland.
Owner: Mill Hill Missionaries.
AQUIFER.--Confined aquifer in sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in. (0.15 m), depth 198 ft (60.4 m), cased to 193 ft (58.8 m), 30-slot plastic screen 193 ft (58.8 m) to 198 ft (60.4 m).
DATUM.--Altitude of land-surface datum is 220 ft (67 m), from topographic map. Measuring point: Top of casing, 3.50 ft (1.067 m) above land-surface datum.
REMARKS.--Water level affected by pumping from distant municipal well field.
PERIOD OF RECORD.--September 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 112.10 ft (34.17 m) below land-surface datum, Oct. 11, 1980; lowest measured, 126.55 ft (38.57 m) below land-surface datum, September 27, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 113.48 | 115.28 | 114.32 | 116.05 | 114.10 | 117.45 | 115.79 | 115.63 | 119.36 | 118.66 | 119.37 | 120.24 |
| 2 | 113.14 | 115.35 | 114.61 | 115.61 | 113.62 | 117.86 | 115.39 | 116.09 | 119.71 | 119.19 | 119.69 | 120.40 |
| 3 | 112.99 | 115.28 | 114.85 | 116.01 | 113.93 | 117.68 | 115.44 | 116.83 | 119.50 | 118.93 | 119.55 | 120.20 |
| 4 | 112.78 | 115.45 | 115.26 | 115.88 | 114.30 | 117.34 | 115.05 | 117.38 | 119.29 | 118.77 | 119.77 | 120.12 |
| 5 | 113.05 | 115.97 | 115.69 | 115.78 | 114.39 | 116.99 | 114.70 | 117.14 | 119.06 | 118.21 | 119.39 | 119.83 |
| 6 | 113.27 | 115.92 | 115.63 | 115.38 | 114.18 | 116.58 | 114.70 | 117.25 | 119.16 | 118.19 | 119.15 | 119.88 |
| 7 | 113.09 | 115.79 | 115.41 | 114.77 | 113.87 | 116.77 | 115.16 | 117.74 | 119.05 | 118.07 | 119.19 | 120.10 |
| 8 | 112.71 | 115.59 | 115.60 | 115.02 | 113.27 | 116.76 | 114.92 | 117.84 | 118.85 | 118.46 | 118.93 | 120.20 |
| 9 | 112.69 | 115.34 | 115.51 | 115.05 | 113.70 | 116.90 | 115.09 | 118.26 | 118.76 | 118.27 | 118.79 | 119.92 |
| 10 | 112.71 | 114.97 | 115.86 | 114.84 | 113.90 | 116.47 | 115.33 | 117.98 | 118.72 | 118.92 | 118.99 | 119.77 |
| 11 | 112.20 | 115.55 | 116.01 | 114.69 | 113.09 | 116.33 | 115.54 | 118.19 | 118.62 | 119.01 | 118.77 | 119.92 |
| 12 | 112.13 | 115.63 | 116.30 | 114.70 | 113.63 | 116.65 | 115.67 | 117.90 | 118.86 | 119.63 | 118.79 | 119.72 |
| 13 | 112.24 | 116.08 | 116.58 | 114.42 | 113.89 | 116.26 | 116.32 | 118.43 | 118.65 | 119.37 | 118.65 | 119.93 |
| 14 | 112.45 | 116.02 | 116.52 | 114.31 | 113.89 | 116.29 | 115.87 | 118.26 | 118.30 | 119.08 | 119.18 | 119.54 |
| 15 | 113.32 | 115.93 | 116.51 | 114.33 | 113.64 | 115.84 | 116.41 | 118.40 | 117.93 | 119.59 | 118.86 | 119.61 |
| 16 | 113.33 | 115.74 | 116.50 | 114.26 | 113.16 | 115.95 | 116.12 | 118.03 | 117.90 | 119.48 | 118.83 | 119.75 |
| 17 | 113.42 | 115.72 | 116.41 | 114.15 | 112.98 | 115.61 | 115.91 | 118.14 | 117.86 | 119.95 | 118.81 | 119.62 |
| 18 | 112.97 | 115.87 | 116.03 | 114.31 | 113.48 | 115.47 | 115.56 | 118.43 | 118.48 | 120.56 | 119.08 | 119.49 |
| 19 | 112.77 | 116.03 | 116.70 | 114.48 | 113.23 | 115.52 | 115.48 | 118.15 | 118.28 | 120.88 | 118.99 | 118.90 |
| 20 | 112.79 | 115.91 | 117.03 | 114.65 | 112.99 | 115.41 | 115.17 | 118.62 | 118.61 | 120.71 | 119.42 | 119.07 |
| 21 | 113.43 | 115.49 | 117.40 | 114.70 | 113.16 | 115.87 | 115.80 | 118.48 | 118.36 | 120.44 | 119.44 | 119.16 |
| 22 | 113.76 | 115.40 | 117.23 | 114.21 | 113.79 | 116.69 | 115.64 | 118.87 | 118.16 | 120.39 | 120.04 | 119.22 |
| 23 | 114.55 | 115.42 | 116.55 | 114.14 | 114.59 | 116.83 | 115.55 | 118.80 | 118.23 | 120.55 | 119.83 | 119.03 |
| 24 | 114.94 | 115.73 | 116.30 | 114.19 | 115.07 | 116.44 | 114.88 | 118.41 | 118.56 | 120.41 | 120.25 | 119.72 |
| 25 | 113.87 | 115.55 | 117.00 | 114.65 | 115.10 | 116.34 | 115.23 | 118.08 | 118.12 | 120.53 | 120.33 | 120.03 |
| 26 | 113.56 | 115.63 | 116.86 | 114.22 | 115.89 | 116.03 | 115.95 | 118.23 | 118.46 | 120.17 | 120.38 | 120.10 |
| 27 | 114.51 | 115.35 | 116.68 | 114.24 | 116.76 | 115.91 | 116.42 | 118.99 | 118.55 | 120.06 | 120.15 | 119.63 |
| 28 | 114.81 | 114.57 | 116.36 | 114.23 | 117.04 | 115.97 | 116.16 | 118.96 | 118.43 | 119.82 | 120.60 | 119.89 |
| 29 | 115.47 | 114.13 | 116.26 | 114.33 | --- | 115.63 | 115.59 | 119.36 | 118.89 | 119.40 | 120.48 | 119.84 |
| 30 | 115.48 | 114.32 | 115.95 | 114.42 | --- | 115.87 | 115.80 | 119.15 | 118.67 | 119.41 | 120.49 | 119.94 |
| 31 | 115.53 | --- | 116.29 | 114.52 | --- | 116.16 | --- | 118.86 | --- | 119.59 | 120.26 | --- |

WTR YEAR 1981 HIGHEST 112.10 Oct. 11, 1980 LOWEST 120.95 Jul. 19, 1981



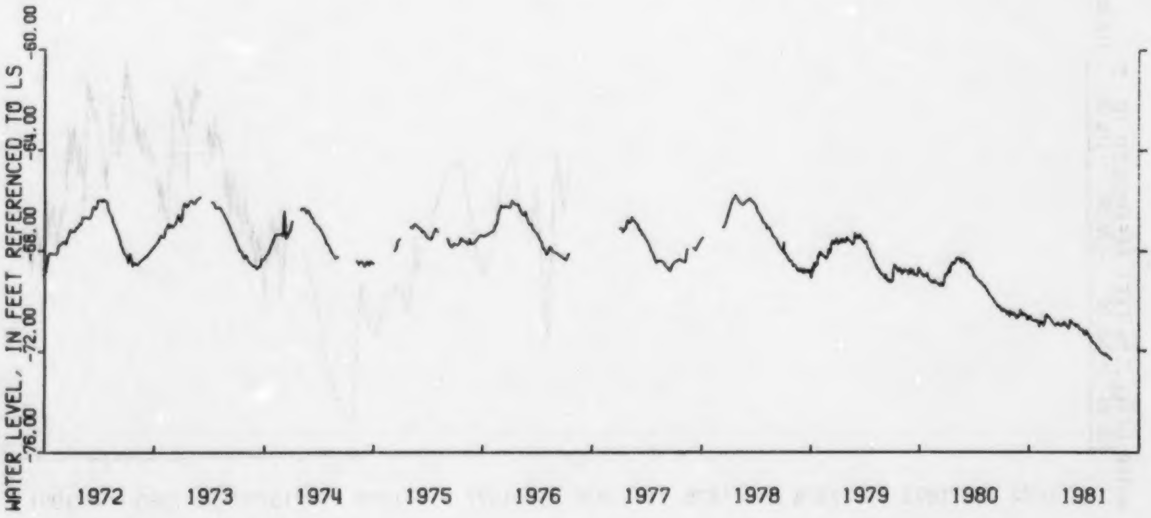
## DUTCHESS COUNTY

414737073563301. Local number, Du 321.
LOCATION.--Lat 41°47'37", long 73°56'33", Hydrologic Unit 02020008, near Hyde Park.
Owner: U.S. National Park Service.
AQUIFER.--Confined aquifer in shale of Ordovician age.
WELL CHARACTERISTICS.--Drilled unused well, diameter 6 in. (0.15 m), depth 128 ft (39.0 m), cased to unknown depth, open hole.
DATUM.--Altitude of land-surface datum is 170 ft (52 m), from topographic map. Measuring point: Top of extended casing, 3.10 ft (0.944 m) above land-surface datum.
REMARKS.--Water level responds to semidiurnal earth tides (approximately 0.05 ft or 0.015 m).
PERIOD OF RECORD.--September 1948 to April 1950, April 1953 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 65.62 ft (20.00 m) below land-surface datum, June 22, 1953; lowest, 73.85 ft (22.51 m) below land-surface datum, Sept. 13, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 70.40 | 70.48 | 70.41 | 70.61 | 71.03 | 70.60 | 70.91 | 70.91 | 70.96 | 71.34 | 71.73 | 72.10 |
| 2 | 70.36 | 70.51 | 70.45 | 70.59 | 70.87 | 70.59 | 70.84 | 70.94 | 71.02 | 71.36 | 71.71 | 72.09 |
| 3 | 70.32 | 70.57 | 70.44 | 70.63 | 70.77 | --- | 70.86 | 70.99 | 71.03 | 71.33 | 71.68 | 72.12 |
| 4 | 70.28 | 70.56 | 70.50 | 70.66 | 70.80 | --- | 70.89 | 71.03 | 70.95 | 71.27 | 71.68 | 72.14 |
| 5 | 70.34 | 70.49 | 70.56 | 70.71 | 70.85 | --- | 70.88 | 71.04 | 70.94 | 71.17 | 71.67 | 72.15 |
| 6 | 70.39 | 70.48 | 70.57 | 70.74 | 70.88 | --- | 70.87 | 71.02 | 70.92 | 71.14 | 71.68 | 72.16 |
| 7 | 70.41 | 70.47 | 70.58 | --- | 70.89 | --- | 70.94 | 71.03 | 70.92 | 71.16 | 71.70 | 72.17 |
| 8 | 70.39 | 70.45 | 70.54 | --- | 70.82 | --- | 70.97 | 71.08 | 70.97 | 71.21 | 71.72 | 72.14 |
| 9 | 70.37 | 70.50 | 70.49 | --- | 70.79 | --- | 70.95 | 71.11 | 70.95 | 71.23 | 71.76 | 72.06 |
| 10 | 70.41 | 70.48 | 70.47 | --- | 70.90 | --- | 70.96 | 71.12 | 70.96 | 71.25 | 71.83 | 72.07 |
| 11 | 70.39 | 70.51 | 70.51 | --- | 70.88 | --- | 70.95 | 71.08 | 71.01 | 71.30 | 71.86 | 72.08 |
| 12 | 70.36 | 70.57 | 70.55 | --- | 70.84 | --- | 70.95 | 70.84 | 71.09 | 71.35 | 71.85 | 72.11 |
| 13 | 70.38 | 70.63 | 70.52 | --- | 70.96 | --- | 71.00 | 70.74 | 71.13 | 71.35 | 71.85 | 72.14 |
| 14 | 70.44 | 70.62 | 70.51 | --- | 71.00 | --- | 71.00 | 70.75 | 71.13 | 71.32 | 71.88 | 72.15 |
| 15 | 70.51 | 70.64 | 70.55 | --- | 70.98 | --- | 70.97 | 70.78 | 71.12 | 71.35 | 71.88 | 72.16 |
| 16 | 70.54 | 70.66 | 70.55 | 70.80 | 70.94 | --- | 70.99 | 70.77 | 71.10 | 71.39 | 71.84 | 72.18 |
| 17 | 70.54 | 70.70 | 70.53 | 70.78 | 70.88 | --- | 70.94 | 70.80 | 71.10 | 71.43 | 71.85 | 72.22 |
| 18 | 70.49 | 70.59 | 70.54 | 70.76 | 70.84 | --- | 70.86 | 70.85 | 71.15 | 71.46 | 71.91 | 72.25 |
| 19 | 70.43 | 70.56 | 70.56 | 70.74 | 70.81 | --- | 70.88 | 70.87 | 71.17 | 71.48 | 71.96 | 72.22 |
| 20 | 70.42 | 70.61 | 70.65 | 70.77 | 70.69 | --- | 70.89 | 70.87 | 71.17 | 71.47 | 71.99 | 72.18 |
| 21 | 70.43 | 70.63 | 70.73 | 70.82 | 70.54 | --- | 70.94 | 70.88 | 71.14 | 71.42 | 72.01 | 72.22 |
| 22 | 70.48 | 70.64 | 70.77 | 70.79 | 70.58 | --- | 70.97 | 70.88 | 71.10 | 71.41 | 72.04 | 72.26 |
| 23 | 70.57 | 70.67 | 70.73 | 70.77 | 70.63 | --- | 70.93 | 70.89 | 71.08 | 71.49 | 72.03 | 72.26 |
| 24 | 70.64 | 70.64 | 70.62 | 70.78 | 70.56 | --- | 70.83 | 70.90 | 71.15 | 71.57 | 72.00 | 72.26 |
| 25 | 70.59 | 70.52 | 70.59 | 70.84 | 70.50 | --- | 70.81 | 70.90 | 71.17 | 71.62 | 72.01 | 72.30 |
| 26 | 70.37 | 70.51 | 70.66 | 70.84 | 70.53 | 70.98 | 70.88 | 70.91 | 71.16 | 71.62 | 72.05 | 72.33 |
| 27 | 70.39 | 70.56 | 70.71 | 70.82 | 70.61 | 70.97 | 70.95 | 70.93 | 71.21 | 71.60 | 72.05 | 72.32 |
| 28 | 70.44 | 70.50 | 70.75 | 70.84 | 70.64 | 70.99 | 70.98 | 70.94 | 71.27 | 71.63 | 72.07 | 72.28 |
| 29 | 70.47 | 70.35 | 70.70 | 70.88 | --- | 70.96 | 70.95 | 70.92 | 71.32 | 71.57 | 72.11 | 72.31 |
| 30 | 70.51 | 70.35 | 70.61 | 70.96 | --- | 70.90 | 70.91 | 70.90 | 71.31 | 71.59 | 72.12 | 72.34 |
| 31 | 70.50 | --- | 70.60 | 71.01 | --- | 70.87 | --- | 70.90 | --- | 71.68 | 72.11 | --- |

WTR YEAR 1981 HIGHEST 70.26 Oct. 4, 1980 LOWEST 72.37 Sept. 26, 1981



## DUTCHESS COUNTY

414128073475201. Local number, Du 1009.

LOCATION.--Lat 41°41'28", long 73°47'52", Hydrologic Unit 02020008, James Baird State Park, near Pleasant Valley. Owner: New York State Department of Environmental Conservation.

AQUIFER.--Water-table aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation well, diameter 2.5 in. (0.06 m), depth 28 ft (8.5 m) in July 1979 (previously reported as 27 ft or 8.2 m), cased to 25 ft (7.6 m), 1.25-in. (0.03-m) well point (60-gauze screen 25 ft or 7.6 m to 27 ft or 8.2 m).

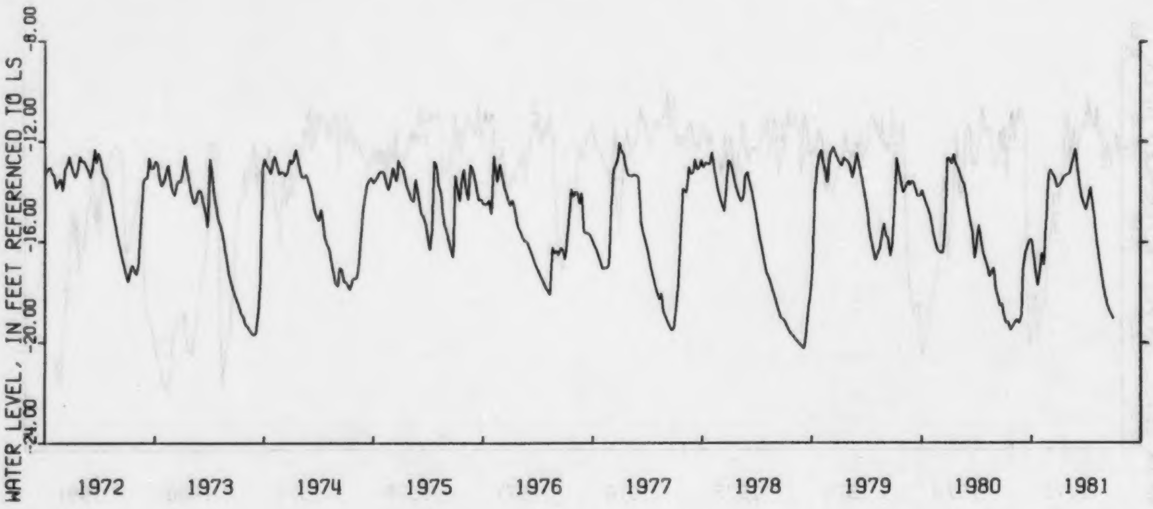
DATUM.--Altitude of land-surface datum is 330 ft (101 m), from topographic map. Measuring point: Top of casing, 2.10 ft (0.640 m) above land-surface datum.

PERIOD OF RECORD.--October 1965 to April 1969, June 1971 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.92 ft (3.63 m) below land-surface datum, Sept. 14, 1971; lowest measured, 20.60 ft (6.28 m) below land-surface datum, Nov. 24, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|---|---|---|---|---|---|---|---|
| OCT 06, 1980 | 19.25 | DEC 30, 1980 | 15.91 | APR 06, 1981 | 13.65 | JUL 27, 1981 | 15.02 |
| 13 | 19.19 | JAN 13, 1981 | 17.22 | 13 | 13.45 | AUG 03 | 15.77 |
| 20 | 19.53 | 20 | 17.74 | 20 | 13.35 | 10 | 16.52 |
| NOV 03 | 19.20 | FEB 02 | 16.44 | MAY 04 | 13.27 | 17 | 17.06 |
| 10 | 19.07 | 09 | 16.92 | 18 | 12.64 | 24 | 17.62 |
| 17 | 19.25 | 23 | 13.34 | 25 | 12.28 | 31 | 18.04 |
| 25 | 18.93 | MAR 02 | 13.12 | JUN 09 | 13.84 | SEP 08 | 18.49 |
| DEC 01 | 17.12 | 09 | 13.30 | 15 | 14.25 | 14 | 18.73 |
| 08 | 16.42 | 17 | 13.44 | 29 | 14.74 | 22 | 18.91 |
| 22 | 15.93 | 23 | 13.84 | JUL 13 | 13.84 | 28 | 19.06 |



## GREENE COUNTY

422319073482001. Local number, G 1.

LOCATION.--Lat 42°23'19", long 73°48'20", Hydrologic Unit 02020006, near West Coxsackie.
Owner: Harry Andrews.

AQUIFER.--Water-table aquifer in till of Pleistocene age

WELL CHARACTERISTICS.--Dug domestic well, diameter 36 in. (0.91 m), depth 18 ft (5.5 m) in August 1979 (previously reported as 19 ft or 5.8 m), tile-lined to 2 ft (0.6 m), stone-lined to 19 ft (5.8 m).

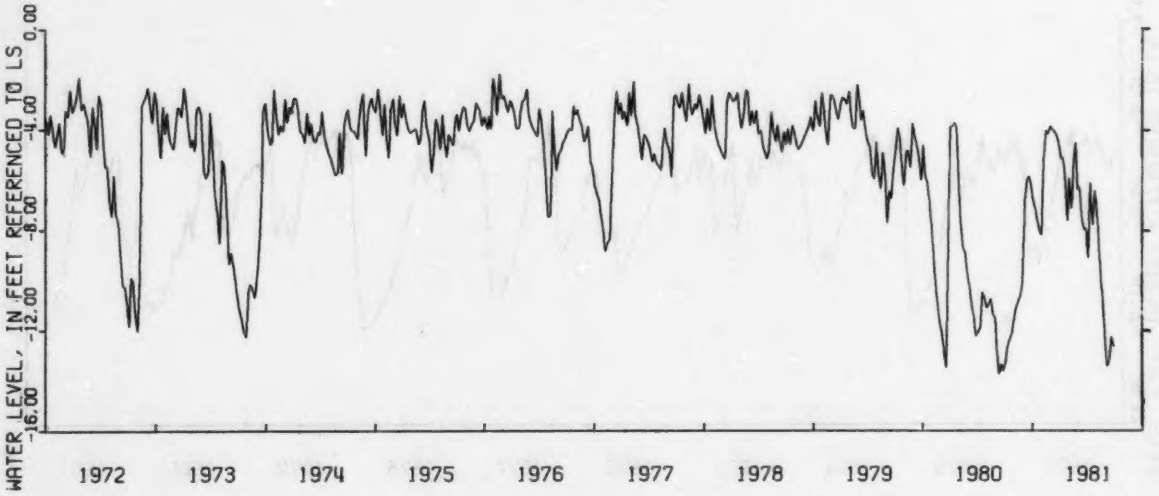
DATUM.--Altitude of land-surface datum is 130 ft (40 m), from topographic map. Measuring point: Chiseled square on top of inner step on curb, 0.18 ft (0.055 m) below land-surface datum.

PERIOD OF RECORD.--December 1945 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 1.07 ft (0.33 m) below land-surface datum, Mar. 15, 1962; lowest measured 15.56 ft (4.74 m) below land-surface datum, Feb. 27, 1963.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|---|---|---|---|---|---|---|---|
| OCT 07. 1980 | 12.65 | JAN 07, 1981 | 7.15 | APR 09, 1981 | 5.12 | JUL 09, 1981 | 6.12 |
| 14 | 12.35 | 14 | 7.65 | 16 | 5.85 | 16 | 7.82 |
| 21 | 12.10 | 21 | 8.00 | 24 | 7.64 | 23 | 6.42 |
| 28 | 11.52 | 28 | 8.22 | 30 | 5.93 | 30 | 7.01 |
| NOV 04 | 11.10 | FEB 04 | 5.24 | MAY 07 | 7.14 | AUG 06 | 8.37 |
| 12 | 10.81 | 12 | 4.01 | 14 | 5.19 | 13 | 9.75 |
| 19 | 10.61 | 18 | 4.18 | 21 | 4.52 | 20 | 11 07 |
| 25 | 10.12 | 27 | 3.86 | 28 | 6.39 | 27 | 12.47 |
| DEC 03 | 6.84 | MAR 05 | 4.00 | JUN 04 | 6.30 | SEP 03 | 13.44 |
| 10 | 6.02 | 12 | 4.07 | 11 | 7.62 | 10 | 13.18 |
| 17 | 5.86 | 19 | 4.19 | 18 | 8.00 | 17 | 12.27 |
| 24 | 6.15 | 26 | 4.47 | 25 | 7.93 | 24 | 12.64 |
| 31 | 6.75 | APR 02 | 5.13 | JUL 02 | 9.12 | | |

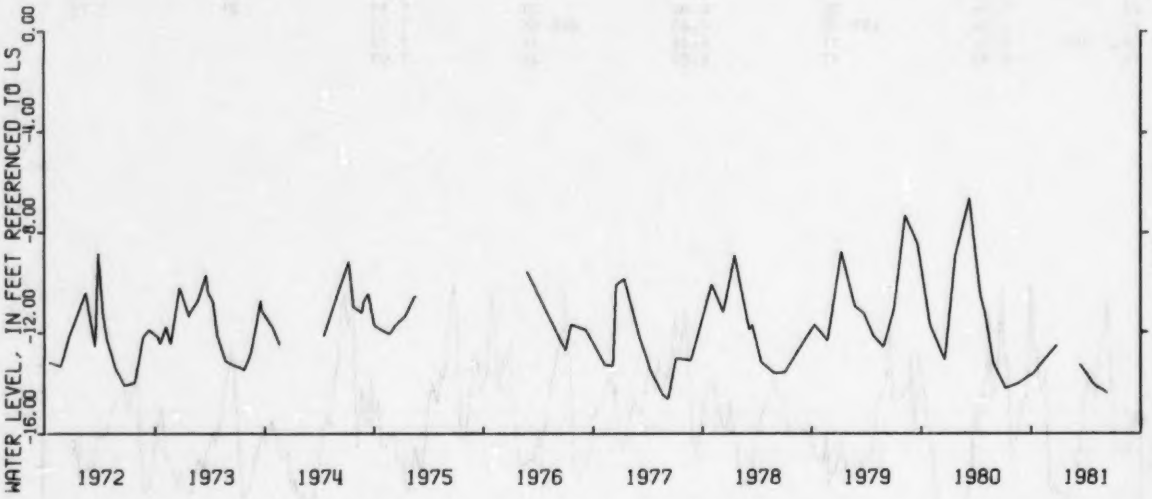


## HAMILTON COUNTY

432832074122201. Local number, H 3.
LOCATION.--Lat 43°28'32", long 74°12'22", Hydrologic Unit 02020002, near Griffin.
Owner: F. B. Girard.
AQUIFER.--Water-table aquifer in sand of Pleistocene age.
WELL CHARACTERISTICS.--Bored observation well, diameter 2.5 in. (0.06 m), depth 15.2 ft (4.63 m) as of June 1981, filled in from original depth of 19 ft (5.8 m), cased to 16 ft (4.9 m), 1.25-in. (0.03-m) well point (60-gauze screen 16 ft or 4.9 m to 19 ft or 5.8 m damaged during well installation).
DATUM.--Altitude of land-surface datum is 1,290 ft (393 m), from topographic map. Measuring point: Top of casing, 2.30 ft (0.701 m) above land-surface datum.
PERIOD OF RECORD.--November 1965 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.63 ft (2.02 m) below land-surface datum, June 6, 1980; lowest measured, 15.44 ft (4.71 m) below land-surface datum, Oct. 21, 1969.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|---|---|---|---|---|---|---|---|
| OCT 06, 1980 | 14.20 | JAN 06, 1981 | 13.60 | MAR 23, 1981 | 12.51 | JUL 29, 1981 | 14.06 |
| NOV 17 | 14.00 | FEB 10 | 13.09 | JUN 15 | 13.32 | SEP 09 | 14.39 |

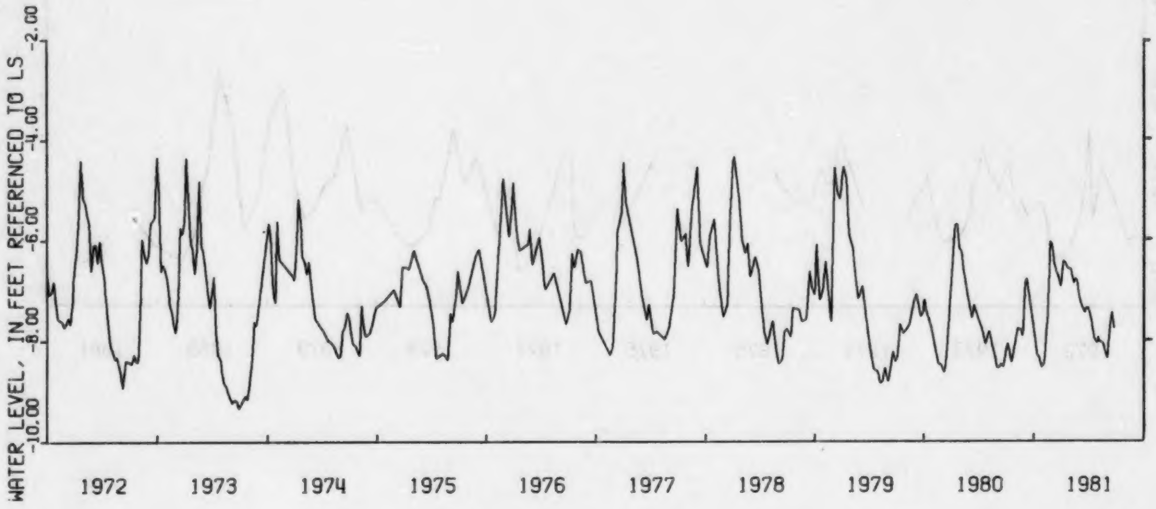


## MONTGOMERY COUNTY

430141074423501. Local number, Mt 1.
LOCATION.--Lat 43°01'41", long 74°42'35", Hydrologic Unit 02020004, near St. Johnsville.
Owner: Marion G. Groff.
AQUIFER.--Water-table aquifer in till of Pleistocene age.
WELL CHARACTERISTICS.--Dug unused well, diameter 24 in. (0.61 m), depth 12 ft (3.7 m), stone-lined.
DATUM.--Altitude of land-surface datum is 710 ft (216 m), from topographic map. Measuring point: Top edge of limestone slab at northeast corner of well opening, at land-surface datum.
PERIOD OF RECORD.--October 1942 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 3.74 ft (1.14 m) below land-surface datum, Apr. 10 1971: lowest measured 9.99 ft (3.04 m) below land-surface datum, Aug. 28, 1949.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|---|---|---|---|---|---|---|---|
| OCT 03, 1980 | 8.05 | JAN 25, 1981 | 8.53 | APR 24, 1981 | 6.58 | JUL 28, 1981 | 8.04 |
| 10 | 8.22 | FEB 02 | 8.46 | MAY 01 | 6.56 | 31 | 7.92 |
| 17 | 8.43 | 07 | 7.97 | 11 | 6.86 | AUG 03 | 8.02 |
| NOV 06 | 7.75 | 13 | 7.46 | 16 | 6.75 | 10 | 8.03 |
| 17 | 7.78 | 21 | 6.03 | 22 | 6.81 | 17 | 8.06 |
| 22 | 7.91 | 28 | 6.09 | 29 | 7.12 | 24 | 8.23 |
| DEC 01 | 6.84 | MAR 07 | 6.45 | JUN 06 | 7.32 | 31 | 8.35 |
| 06 | 6.76 | 14 | 6.62 | 16 | 7.44 | SEP 07 | 7.78 |
| 13 | 7.10 | 20 | 6.72 | 20 | 7.36 | 14 | 7.43 |
| 20 | 7.39 | 28 | 6.92 | 27 | 7.33 | 21 | 7.75 |
| 29 | 7.74 | APR 06 | 6.40 | JUL 06 | 7.53 | | |
| JAN 09, 1981 | 8.30 | 11 | 6.44 | 11 | 7.72 | | |
| 16 | 8.32 | 17 | 6.52 | 18 | 7.97 | | |



## ONEIDA COUNTY

433112075091501. Local number. Oe 151.

LOCATION.--Lat 43°31'12", long 75°09'15", Hydrologic Unit 04150101, at Woodgate.
Owner: Henry Rubyor.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Dug domestic well, diameter 36 in. (0.91 m), depth 31 ft (9.4 m), stone-lined.

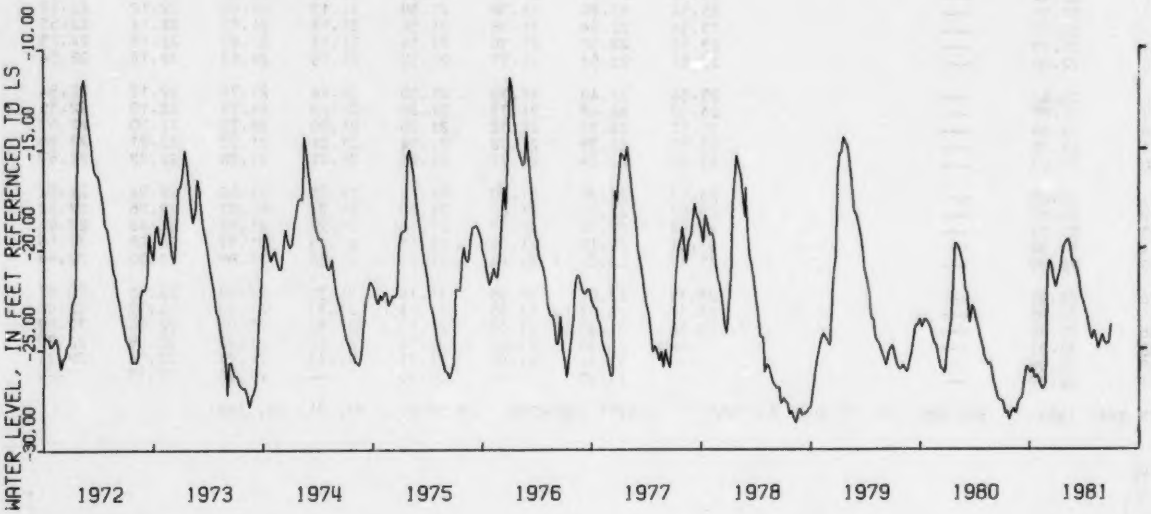
DATUM.--Land-surface datum is 1,484.94 ft (452.609 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of 2-ft (0.6-m) square concrete well cover at midpoint of south side of rectangular opening, 1.00 ft (0.305 m) above land-surface datum.

PERIOD OF RECORD.--July 1926 to August 1945, October 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 11.43 ft (3.48 m) below land-surface datum, Apr. 3, 1976; lowest measured 30.31 ft (9.24 m) below land-surface datum, Feb. 25, 1961.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|---|---|---|---|---|---|---|---|
| OCT 04, 1980 | 27.64 | JAN 03, 1981 | 26.19 | APR 04, 1981 | 21.44 | JUL 04, 1981 | 23.02 |
| 11 | 28.24 | 10 | 26.00 | 11 | 21.13 | 11 | 23.52 |
| 18 | 28.10 | 17 | 26.47 | 18 | 20.41 | 18 | 24.11 |
| 25 | 28.54 | 24 | 26.30 | 25 | 19.86 | 25 | 24.56 |
| NOV 01 | 28.16 | 31 | 26.53 | MAY 02 | 19.62 | AUG 01 | 24.09 |
| 08 | 27.98 | FEB 07 | 26.90 | 09 | 19.56 | 08 | 24.40 |
| 15 | 28.22 | 14 | 27.02 | 16 | 19.90 | 15 | 25.00 |
| 22 | 27.72 | 21 | 26.70 | 23 | 20.60 | 22 | 24.60 |
| 29 | 27.48 | 28 | 21.29 | 30 | 20.64 | 29 | 24.30 |
| DEC 06 | 27.47 | MAR 07 | 20.62 | JUN 06 | 21.02 | SEP 05 | 24.65 |
| 13 | 26.47 | 14 | 20.74 | 13 | 21.50 | 12 | 24.81 |
| 20 | 25.87 | 21 | 21.44 | 20 | 22.30 | 19 | 24.69 |
| 27 | 26.00 | 28 | 21.94 | 27 | 22.62 | 26 | 23.79 |



## ONEIDA COUNTY

433012075134202. Local number, Oe 766.

LOCATION.--Lat 43°30'12", long 75°13'42", Hydrologic Unit 04150101, near Hawkinsville.
Owner: New York State Department of Environmental Conservation.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Driven-washed observation well, diameter 6 in. (0.15 m), depth 31 ft (9.4 m), filled in from original depth of 33 ft (10.1 m), cased to 33 ft (10.1 m), open end.

DATUM.--Land-surface datum is 1,190.22 ft (362.779 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of extended casing, 2.63 ft (0.802 m) above land-surface datum.

REMARKS.--Well was driven-washed November 1968 as a replacement for 433012075134201 (local number Oe 765), located 15 ft (4.6 m) east, which has a period of record from November 1965 to November 1968 (unpublished).

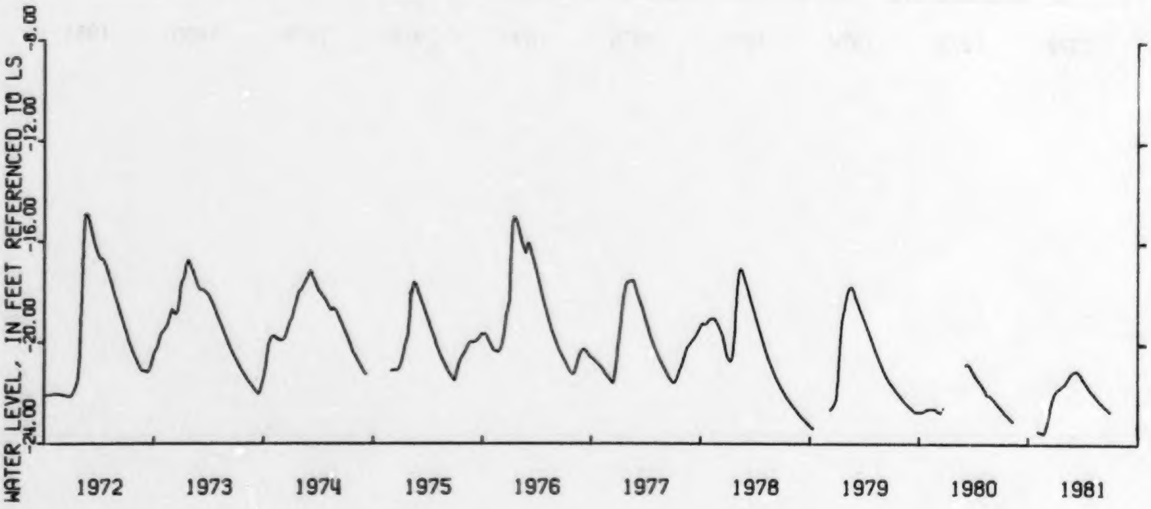
PERIOD OF RECORD.--November 1968 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water lével, 14.87 ft (4.53 m) below land-surface datum, May 21, 1972; lowest recorded, 23.58 ft (7.80 m) below land-surface datum, Feb. 20, 21, 22, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 22.58 | 23.01 | | | --- | 23.33 | 21.90 | 21.60 | 21.10 | 21.45 | 21.98 | 22.37 |
| 2 | 22.60 | 23.02 | | | --- | 23.29 | 21.88 | 21.59 | 21.10 | 21.47 | 21.98 | 22.39 |
| 3 | 22.62 | 23.03 | | | --- | 23.24 | 21.87 | 21.58 | 21.09 | 21.48 | 21.99 | 22.40 |
| 4 | 22.63 | 23.04 | | | --- | 23.18 | 21.86 | 21.56 | 21.08 | 21.49 | 22.00 | 22.42 |
| 5 | 22.65 | 23.05 | | | --- | 23.12 | 21.85 | 21.52 | 21.08 | 21.50 | 22.01 | 22.43 |
| 6 | 22.66 | 23.06 | | | --- | 23.06 | 21.84 | 21.49 | 21.07 | 21.52 | 22.03 | 22.44 |
| 7 | 22.67 | 23.08 | | | --- | 23.00 | 21.83 | 21.48 | 21.08 | 21.54 | 22.05 | 22.45 |
| 8 | 22.69 | 23.09 | | | --- | 22.95 | 21.82 | 21.46 | 21.08 | 21.56 | 22.06 | 22.46 |
| 9 | 22.72 | 23.10 | | | 23.52 | 22.88 | 21.80 | 21.44 | 21.08 | 21.58 | 22.08 | 22.48 |
| 10 | 22.73 | 23.11 | | | 23.53 | 22.82 | 21.80 | 21.42 | 21.09 | 21.60 | 22.10 | 22.49 |
| 11 | 22.74 | --- | | | 23.53 | 22.76 | 21.78 | 21.40 | 21.11 | 21.62 | 22.11 | 22.51 |
| 12 | 22.76 | --- | | | 23.54 | 22.70 | 21.78 | 21.38 | 21.13 | 21.64 | 22.12 | 22.52 |
| 13 | 22.77 | --- | | | 23.54 | 22.64 | 21.78 | 21.36 | 21.14 | 21.65 | 22.14 | 22.53 |
| 14 | 22.79 | --- | | | 23.54 | 22.58 | 21.76 | 21.34 | 21.14 | 21.67 | 22.16 | 22.53 |
| 15 | 22.80 | --- | | | 23.55 | 22.51 | 21.77 | 21.32 | 21.15 | 21.69 | 22.16 | 22.54 |
| 16 | 22.82 | --- | | | 23.56 | 22.49 | 21.75 | 21.30 | 21.16 | 21.71 | 22.17 | 22.54 |
| 17 | 22.83 | --- | | | 23.57 | 22.43 | 21.73 | 21.28 | 21.18 | 21.74 | 22.19 | 22.55 |
| 18 | 22.84 | --- | | | 23.57 | 22.39 | 21.72 | 21.26 | 21.20 | 21.75 | 22.20 | 22.57 |
| 19 | 22.85 | --- | | | 23.57 | 22.33 | 21.72 | 21.24 | 21.21 | 21.77 | 22.21 | 22.58 |
| 20 | 22.84 | --- | | | 23.57 | 22.29 | 21.71 | 21.23 | 21.22 | 21.78 | 22.22 | 22.60 |
| 21 | 22.85 | --- | | | 23.58 | 22.25 | 21.70 | 21.21 | 21.23 | 21.80 | 22.24 | 22.62 |
| 22 | 22.87 | --- | | | 23.57 | 22.21 | 21.69 | 21.20 | 21.24 | 21.82 | 22.26 | 22.62 |
| 23 | 22.89 | --- | | | 23.54 | 22.16 | 21.67 | 21.18 | 21.27 | 21.85 | 22.26 | 22.64 |
| 24 | 22.90 | --- | | | 23.51 | 22.12 | 21.66 | 21.17 | 21.29 | 21.87 | 22.28 | 22.65 |
| 25 | 22.90 | --- | | | 23.47 | 22.09 | 21.66 | 21.15 | 21.30 | 21.88 | 22.30 | 22.66 |
| 26 | 22.92 | --- | | | 23.45 | 22.06 | 21.65 | 21.15 | 21.32 | 21.89 | 22.31 | 22.67 |
| 27 | 22.93 | --- | | | 23.41 | 22.03 | 21.65 | 21.14 | 21.37 | 21.90 | 22.32 | 22.68 |
| 28 | 22.95 | --- | | | 23.36 | 21.99 | 21.63 | 21.13 | 21.39 | 21.91 | 22.34 | 22.69 |
| 29 | 22.97 | --- | | | --- | 21.96 | 21.61 | 21.12 | 21.41 | 21.92 | 22.35 | 22.70 |
| 30 | 22.98 | --- | | | --- | 21.94 | 21.61 | 21.11 | 21.42 | 21.94 | 22.36 | 22.71 |
| 31 | 22.99 | --- | | | --- | 21.93 | --- | 21.10 | --- | 21.96 | 22.37 | --- |

WTR YEAR 1981 HIGHEST 21.07 Jun. 6, 1981 LOWEST RECORDED 23.58 Feb. 20, 21, 22, 1981



## ORANGE COUNTY

411933074150801. Local number, O 104.

LOCATION.--Lat 41°19'33", long 74°15'08", Hydrologic Unit 02020008, near Chester.
Owner: Palisades Interstate Park Commission.

AQUIFER.--Water-table aquifer in limestone of Devonian age.

WELL CHARACTERISTICS.--Drilled unused well, diameter 6 in. (0.15 m), depth 70 ft (21.3 m) in October 1979 (previously reported as 98 ft or 29.9 m), cased to 73 ft (22.3 m), open end.

DATUM.--Altitude of land-surface datum is 445 ft (136 m), from topographic map. Measuring point: Top of extended casing, 4.49 ft (1.369 m) above land-surface datum.

REMARKS.--Water-level fluctuations show hydraulic contact with Seeley Brook, 500 ft (152 m) west.

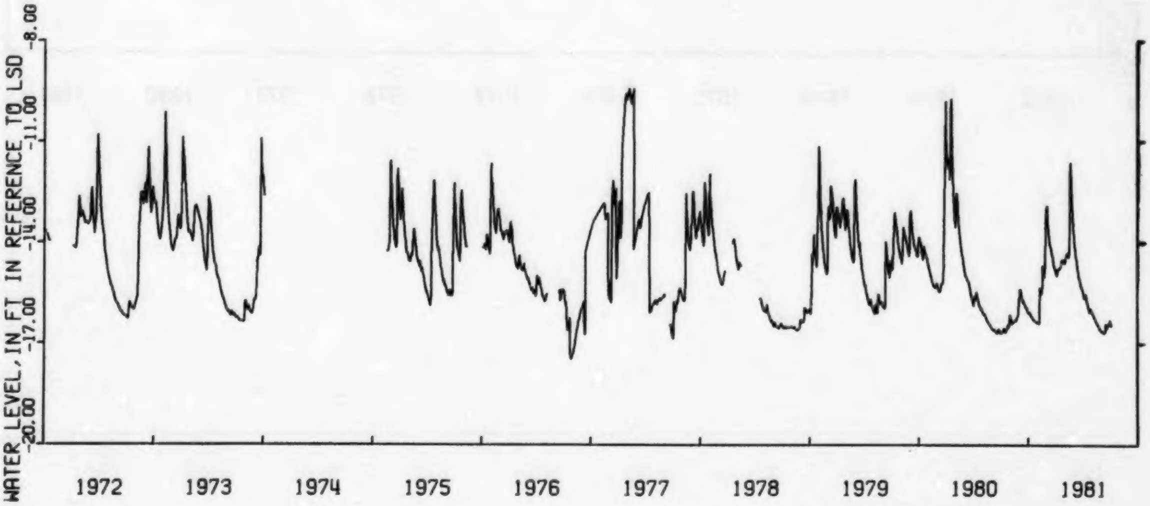
PERIOD OF RECORD.--September 1964 to January 1974, February 1975 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.59 ft (2.92 m) below land-surface datum, Apr. 5, 1970; lowest, 17.50 ft (5.33 m) below land-surface datum, Oct. 26, 1976.

### WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.68 | 16.35 | 15.40 | 16.06 | 16.40 | 13.36 | 14.98 | 14.41 | 14.29 | 15.65 | --- | 16.63 |
| 2 | 16.69 | 16.39 | 15.44 | 16.09 | 15.98 | 13.50 | 14.80 | 14.35 | 14.36 | 15.62 | --- | 16.64 |
| 3 | 16.65 | 16.41 | 15.49 | 16.12 | 15.37 | 13.63 | 14.77 | 14.30 | 14.40 | 15.62 | --- | 16.64 |
| 4 | 16.57 | 16.38 | 15.56 | 16.14 | 15.32 | 13.75 | 14.80 | 14.29 | 14.43 | 15.62 | --- | 16.65 |
| 5 | 16.55 | 16.35 | 15.61 | 16.17 | 15.39 | 13.82 | 14.80 | 14.29 | 14.49 | 15.51 | --- | 16.65 |
| 6 | 16.56 | 16.35 | 15.65 | 16.18 | 15.45 | 13.90 | 14.75 | 14.28 | 14.55 | 15.51 | --- | 16.66 |
| 7 | 16.54 | 16.34 | 15.66 | 16.18 | 15.51 | 13.98 | 14.76 | 14.31 | 14.64 | 15.58 | --- | 16.67 |
| 8 | 16.53 | 16.35 | 15.71 | 16.19 | 15.52 | 14.05 | 14.78 | 14.36 | 14.73 | 15.64 | --- | 16.67 |
| 9 | 16.61 | 16.34 | 15.77 | 16.21 | 15.50 | 14.07 | 14.78 | 14.40 | 14.78 | 15.69 | --- | 16.62 |
| 10 | 16.66 | 16.30 | 15.75 | 16.22 | 15.51 | 14.09 | 14.74 | 14.43 | 14.84 | 15.74 | --- | 16.40 |
| 11 | 16.66 | 16.28 | 15.71 | 16.23 | 15.19 | 14.12 | 14.73 | 14.40 | 14.92 | 15.78 | --- | 16.39 |
| 12 | 16.64 | 16.29 | 15.72 | 16.25 | 14.66 | 14.16 | 14.74 | 13.19 | 14.99 | 15.83 | --- | 16.43 |
| 13 | 16.65 | 16.30 | 15.79 | 16.26 | 14.68 | 14.20 | 14.74 | 12.02 | 15.04 | 15.86 | --- | 16.47 |
| 14 | 16.65 | 16.30 | 15.82 | 16.28 | 14.77 | 14.25 | 14.69 | 11.58 | 15.07 | --- | 16.41 | 16.51 |
| 15 | 16.56 | 16.31 | 15.83 | 16.29 | 14.86 | 14.30 | 14.57 | 11.73 | 15.05 | --- | 16.43 | 16.52 |
| 16 | 16.54 | 16.32 | 15.84 | 16.30 | 14.94 | 14.33 | 14.53 | 11.85 | 15.09 | 15.98 | 16.42 | 16.53 |
| 17 | 16.56 | 16.33 | 15.88 | 16.30 | 14.99 | 14.38 | 14.50 | 12.15 | 15.15 | 16.01 | 16.43 | 16.46 |
| 18 | 16.56 | 16.26 | 15.90 | 16.31 | 15.01 | 14.44 | 14.48 | 12.41 | 15.20 | 16.04 | 16.44 | 16.40 |
| 19 | 16.47 | 16.19 | 15.92 | 16.32 | 15.02 | 14.49 | 14.51 | 12.62 | 15.25 | 16.06 | 16.47 | 16.39 |
| 20 | 16.44 | 16.18 | 15.92 | 16.32 | 14.50 | 14.55 | 14.53 | 12.81 | 15.30 | 16.06 | 16.50 | 16.39 |
| 21 | 16.41 | 16.18 | 15.92 | 16.33 | 13.65 | 14.61 | 14.57 | 12.97 | 15.32 | 15.99 | 16.53 | 16.39 |
| 22 | 16.41 | 16.17 | 15.92 | 16.33 | 13.40 | 14.67 | 14.60 | 13.13 | 15.31 | 15.94 | 16.55 | 16.40 |
| 23 | 16.48 | 16.13 | 15.96 | 16.34 | 13.31 | 14.69 | 14.59 | 13.29 | 15.31 | --- | 16.56 | 16.42 |
| 24 | 16.50 | 16.06 | 16.01 | 16.35 | 12.98 | 14.72 | 14.48 | 13.43 | 15.36 | --- | 16.57 | 16.42 |
| 25 | 16.43 | 15.70 | 16.03 | 16.36 | 12.88 | 14.76 | 14.50 | 13.56 | 15.39 | --- | 16.58 | 16.28 |
| 26 | 16.15 | 15.61 | 16.06 | 16.36 | 12.93 | 14.80 | 14.55 | 13.69 | 15.42 | --- | 16.60 | 16.32 |
| 27 | 16.13 | 15.62 | 16.08 | 16.36 | 13.08 | 14.83 | 14.59 | 13.80 | 15.47 | --- | 16.60 | 16.38 |
| 28 | 16.19 | 15.59 | 16.09 | 16.36 | 13.22 | 14.88 | 14.62 | 13.92 | 15.52 | --- | 16.62 | 16.41 |
| 29 | 16.22 | 15.39 | 16.08 | 16.36 | --- | 14.90 | 14.52 | 14.00 | 15.57 | --- | 16.63 | 16.44 |
| 30 | 16.25 | 15.36 | 16.07 | 16.36 | --- | 14.92 | 14.43 | 14.07 | 15.61 | --- | 16.63 | 16.46 |
| 31 | 16.29 | --- | 16.07 | 16.39 | --- | 14.95 | --- | 14.18 | --- | --- | 16.63 | --- |

WTR YEAR 1981 HIGHEST 11.54 May 14, 1981 LOWEST 16.69 Oct. 1, 2, 1980

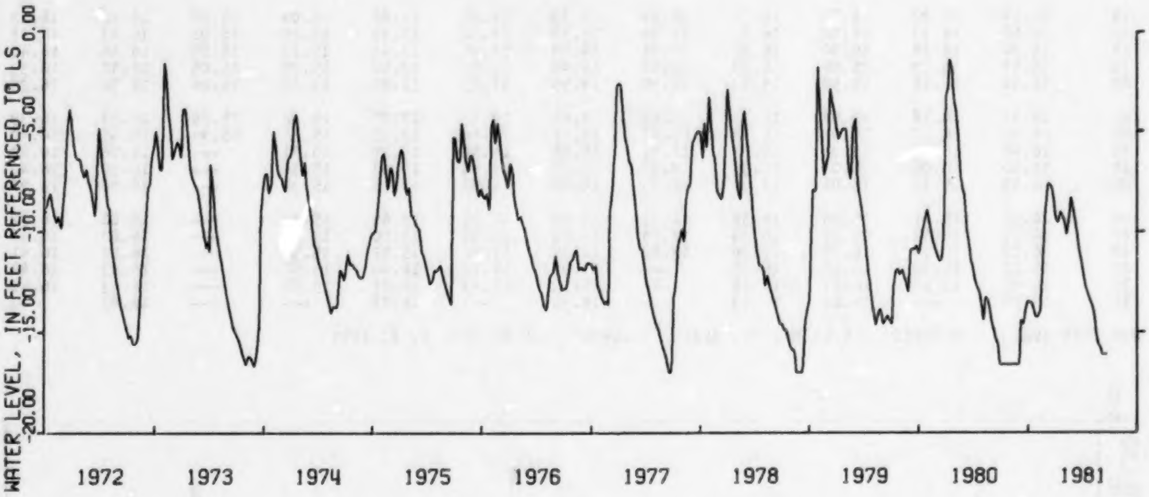


## PUTNAM COUNTY

412450073413101. Local number, P 609.
LOCATION.--Lat 41°24'50", long 73°41'31", Hydrologic Unit 02030101, near Carmel.
Owner: New York City Board of Water Supply.
AQUIFER.--Water-table aquifer in till of Pleistocene age.
WELL CHARACTERISTICS.--Dug unused well, diameter 36 in. (0.91 m), depth 16 ft (4.9 m), stone-lined.
DATUM.--Altitude of land-surface datum is 540 ft (165 m), from topographic map. Measuring point: Top (north side) of 3-in. (0.08-m) coupling set in concrete well cover, at land-surface datum.
REMARKS.--Original depth measured at 17 ft (5.2 m). Depth measured at 16.6 ft (5.06 m) October 1979, filled in to 16 ft (4.9 m) September 1981.
PERIOD OF RECORD.--January 1935 to September 1945, September 1950 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.0 ft (0.30 m) below land-surface datum, Oct. 19, 1955; lowest measured, dry Nov. 1, 30, 1935, Jan. 7, 1936, Sept. 1, 1939, several days in 1953, 1957, 1964, 1966, 1978, Sept. 25, 1980, several days in 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|---|---|---|---|---|---|---|---|
| OCT 03, 1980 | DRY | DEC 26, 1980 | 13.45 | APR 08, 1981 | 9.55 | JUL 09, 1981 | 12.65 |
| 10 | DRY | JAN 02, 1981 | 13.50 | 15 | 9.00 | 15 | 13.00 |
| 17 | DRY | 09 | 13.55 | 22 | 9.30 | 31 | 13.70 |
| 24 | DRY | 23 | 14.25 | 29 | 9.50 | AUG 07 | 14.10 |
| 31 | DRY | 30 | 14.25 | MAY 06 | 10.15 | 14 | 15.00 |
| NOV 07 | DRY | FEB 06 | 13.90 | 13 | 9.40 | 21 | 15.60 |
| 14 | DRY | 24 | 8.90 | 20 | 8.30 | 28 | 15.70 |
| 21 | DRY | MAR 04 | 7.60 | 27 | 8.90 | SEP 04 | DRY |
| 28 | DRY | 11 | 7.65 | JUN 09 | 9.90 | 11 | DRY |
| DEC 04 | 14.40 | 18 | 7.90 | 17 | 10.90 | 18 | DRY |
| 12 | 14.60 | 25 | 8.70 | 25 | 11.50 | | |
| 19 | 13.90 | 31 | 9.35 | JUL 02 | 12.10 | | |

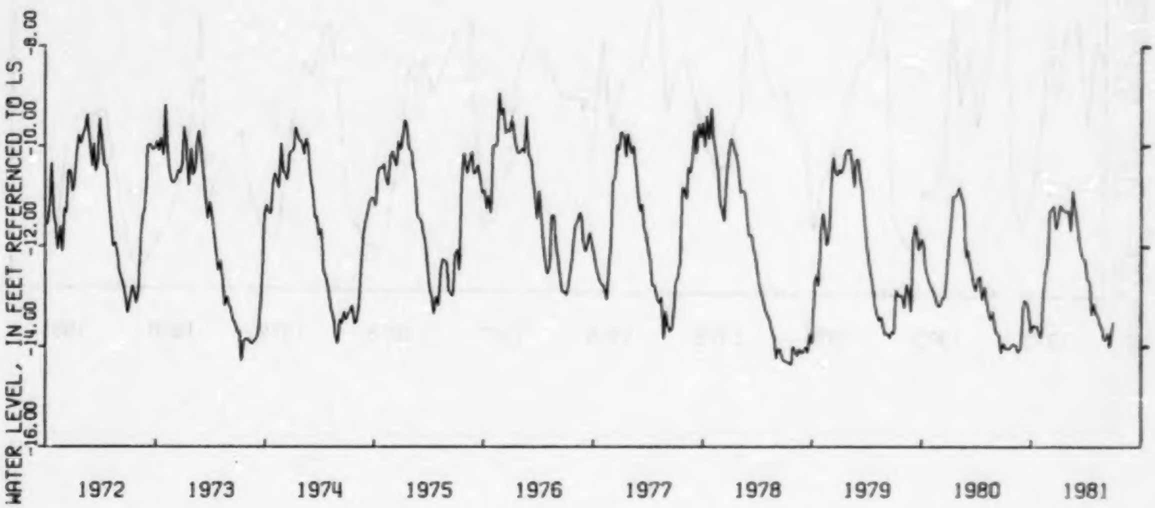


## RENSSELAER COUNTY

423834073391001. Local number, Re 700.
LOCATION.--Lat 42°38'34", long 73°39'10", Hydrologic Unit 02020006, near Defreestville.
Owner: William P. Hofmann.
AQUIFER.--Water-table aquifer in sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Dug domestic well, diameter 4 ft (1.2 m), depth 16 ft (4.9 m), stone-lined.
DATUM.--Altitude of land-surface datum is 405 ft (123 m), from topographic map. Measuring point: Top edge of concrete curbing at midpoint of north side of rectangular opening, 2.00 ft (0.609 m) above land-surface datum.
PERIOD OF RECORD.--September 1954 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 8.92 ft (2.72 m) below land-surface datum, Apr. 4, 1970; lowest measured 15.49 ft (4.72 m) below land-surface datum, Oct. 3, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|---|---|---|---|---|---|---|---|
| OCT 04, 1980 | 14.04 | JAN 10, 1981 | 13.61 | APR 18, 1981 | 11.30 | JUL 25, 1981 | 13.14 |
| 11 | 14.05 | 17 | 13.60 | 25 | 11.32 | AUG 01 | 13.34 |
| 18 | 14.05 | 24 | 13.75 | MAY 02 | 11.30 | 08 | 13.39 |
| 26 | 13.96 | 31 | 13.83 | 09 | 11.70 | 15 | 13.58 |
| NOV 01 | 13.95 | FEB 07 | 12.98 | 16 | 10.89 | 22 | 13.66 |
| 08 | 13.99 | 14 | 12.55 | 23 | 11.22 | 29 | 13.88 |
| 15 | 14.12 | 21 | 12.32 | 30 | 11.48 | SEP 05 | 13.85 |
| 23 | 14.04 | MAR 01 | 11.29 | JUN 06 | 11.88 | 12 | 13.73 |
| 30 | 13.29 | 07 | 11.27 | 13 | 12.15 | 17 | 14.03 |
| DEC 06 | 13.08 | 14 | 11.20 | 20 | 12.25 | 19 | 13.87 |
| 13 | 13.13 | 22 | 11.66 | 27 | 12.28 | 26 | 13.52 |
| 20 | 13.28 | 29 | 11.45 | JUL 04 | 12.68 | | |
| 27 | 13.72 | APR 04 | 11.19 | 11 | 12.70 | | |
| JAN 04, 1981 | 13.57 | 12 | 11.27 | 18 | 13.37 | | |

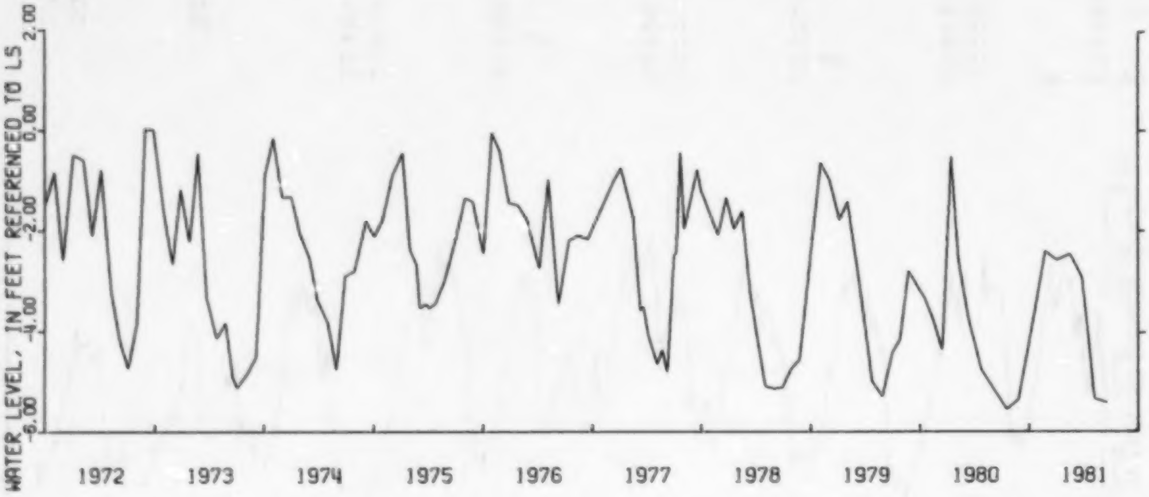


## RENSSELAER COUNTY

423225073430501. Local number, Re 702.
LOCATION.--Lat 42°32'25", long 73°43'05". Hydrologic Unit 02020006, near Brookview.
Owner: Nicholas J. Bult.
AQUIFER.--Water-table aquifer in sand of Pleistocene age.
WELL CHARACTERISTICS.--Bored observation well, diameter 2.5 in. (0.06 m), depth 16 ft (4.9 m), cased to 13 ft (4.0 m), 1.5-in. (0.04-m) well point (60-gauze screen 13 ft or 4.0 m to 16 ft or 4.9 m).
DATUM.--Altitude of land-surface datum is 175 ft (53 m), from topographic map. Measuring point: Top of casing, 3.30 ft (1.006 m) above land-surface datum.
PERIOD OF RECORD.--November 1965 to current year. Records prior to October 1977 are unpublished and available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.03 ft (0.01 m) above land-surface datum, November 29, 1972; lowest measured, 6.42 ft (1.96 m) below land-surface datum, September 22, 1970.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|---|---|---|---|---|---|---|---|
| OCT 17, 1980 | 5.56 | FEB 20, 1981 | 2.41 | MAY 14, 1981 | 2.47 | AUG 05, 1981 | 5.35 |
| NOV 24 | 5.36 | MAR 30 | 2.59 | JUN 24 | 2.93 | SEP 15 | 5.42 |



## ROCKLAND COUNTY

411802073593001. Local number, Ro 18.

**LOCATION.**--Lat 41°18'02", long 73°59'30", Hydrologic Unit 02030101, in Bear Mountain State Park near Lemon Road and Seven Lakes Drive.
Owner: Palisades Interstate Park Commission.

**AQUIFER.**--Confined aquifer in Storm King Granite of Precambrian age.

**WELL CHARACTERISTICS.**--Drilled unused well, diameter 6 in. (0.15 m), depth 60 ft (18.3 m), cased to 53 ft (16.2 m), open hole.

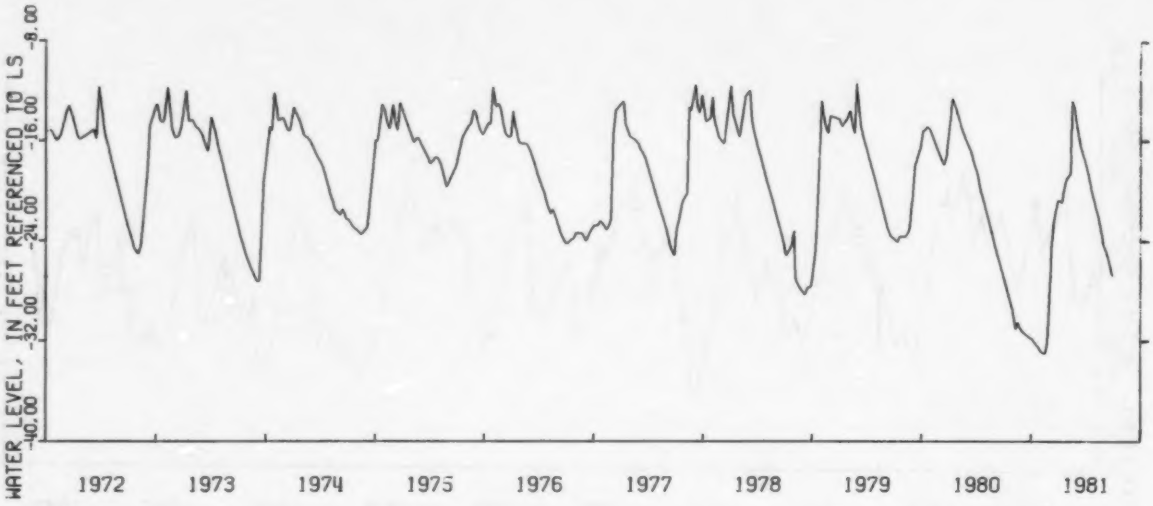
**DATUM.**--Altitude of land-surface datum is 390 ft (119 m), from topographic map. Measuring point: Top of extended casing, 3.65 ft (1.112 m) above land-surface datum.

**PERIOD OF RECORD.**--July 1949 to current year.

**EXTREMES FOR PERIOD OF RECORD.**--Highest water level measured 10.55 ft (3.22 m) below land-surface datum, Mar. 3, 1961; lowest measured 33.02 ft (10.06 m) below land-surface datum, Feb. 6, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|---|---|---|---|---|---|---|---|
| OCT 27, 1980 | 29.45 | JAN 30, 1981 | 32.85 | APR 17, 1981 | 19.73 | JUL 17, 1981 | 19.92 |
| NOV 07 | 31.03 | FEB 06 | 33.02 | 24 | 19.09 | 24 | 20.58 |
| 14 | 30.54 | 13 | 32.99 | MAY 01 | 18.82 | 31 | 21.41 |
| 21 | 30.95 | 20 | 32.14 | 07 | 18.66 | AUG 07 | 21.96 |
| 28 | 31.26 | 27 | 28.62 | 15 | 12.88 | 14 | 22.73 |
| DEC 05 | 31.42 | MAR 04 | 25.95 | 22 | 13.49 | 21 | 23.47 |
| 12 | 31.53 | 06 | 24.66 | 28 | 14.61 | 28 | 24.42 |
| 18 | 31.69 | 13 | 22.31 | 29 | 14.71 | SEP 03 | 24.76 |
| 26 | 31.75 | 18 | 21.72 | JUN 05 | 15.65 | 11 | 25.42 |
| JAN 02, 1981 | 31.94 | 20 | 21.50 | 12 | 16.47 | 18 | 26.14 |
| 09 | 32.17 | 27 | 20.80 | 19 | 17.06 | 25 | 26.82 |
| 16 | 32.38 | APR 03 | 20.78 | 26 | 17.74 | | |
| 20 | 32.46 | 10 | 21.00 | JUL 03 | 18.42 | | |
| 23 | 32.57 | 14 | 20.10 | 10 | 19.08 | | |



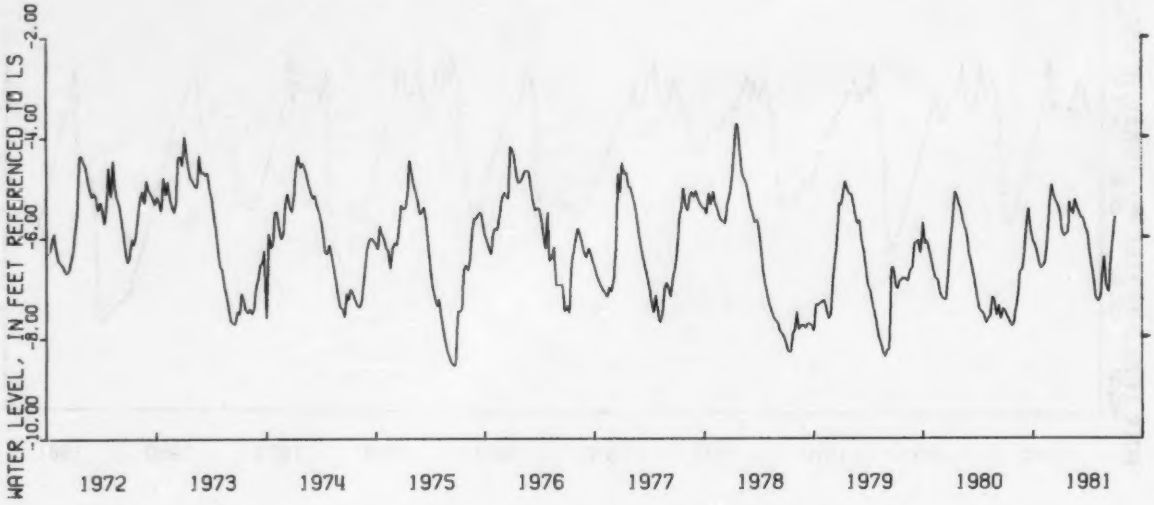
## ST LAWRENCE COUNTY

444904074455201. Local number, St 40.
**LOCATION.**--Lat 44°49'04", long 74°45'52". Hydrologic Unit 04150306, near Brasher Falls.
Owner: New York State Department of Environmental Conservation.
**AQUIFER.**--Water-table aquifer in sand of Pleistocene age.
**WELL CHARACTERISTICS.**--Dug unused well, diameter 36 in (0.91 m), depth 12 ft (3.7 m), concrete cased to 12 ft (3.7 m), open end.
**DATUM.**--Altitude of land-surface datum is 300 ft (91 m), from topographic map. Measuring point: Chiseled mark on top edge of 6-in. (0.15-m) by 8-in. (0.20-m) opening of concrete well cover, 0.65 ft (0.198 m) above land-surface datum.
**PERIOD OF RECORD.**--May 1953 to current year.
**EXTREMES FOR PERIOD OF RECORD.**--Highest water level measured 3.24 ft (0.99 m) below land-surface datum, Apr 21, 1971: lowest measured 9.38 ft (2.86 m) below land-surface datum, Oct. 24, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|---|---|---|---|---|---|---|---|
| OCT 04, 1980 | 7.57 | JAN 04, 1981 | 6.14 | APR 11, 1981 | 5.97 | JUL 12, 1981 | 6.54 |
| 12 | 7.65 | 11 | 6.27 | 21 | 5.91 | 18 | 6.80 |
| 19 | 7.76 | 18 | 6.48 | 25 | 5.89 | 25 | 7.19 |
| 26 | 7.71 | 24 | 6.61 | 27 | 5.29 | AUG 02 | 7.27 |
| 30 | 7.48 | 31 | 6.57 | MAY 03 | 5.44 | 09 | 7.21 |
| NOV 02 | 7.42 | FEB 07 | 6.49 | 11 | 5.54 | 16 | 6.74 |
| 09 | 7.14 | 14 | 6.12 | 16 | 5.23 | 22 | 6.38 |
| 16 | 6.67 | 22 | 5.31 | 24 | 5.40 | 29 | 6.95 |
| 23 | 6.62 | 28 | 4.94 | 31 | 5.50 | SEP 06 | 7.09 |
| 29 | 6.37 | MAR 07 | 5.16 | JUN 07 | 5.61 | 12 | 6.56 |
| DEC 07 | 5.72 | 14 | 5.26 | 13 | 5.61 | 20 | 6.01 |
| 14 | 5.42 | 22 | 5.37 | 21 | 5.83 | 26 | 5.59 |
| 21 | 5.80 | 29 | 5.50 E | 28 | 5.90 | | |
| 28 | 6.07 | APR 04 | 5.87 | JUL 05 | 6.27 | | |

E Estimated.



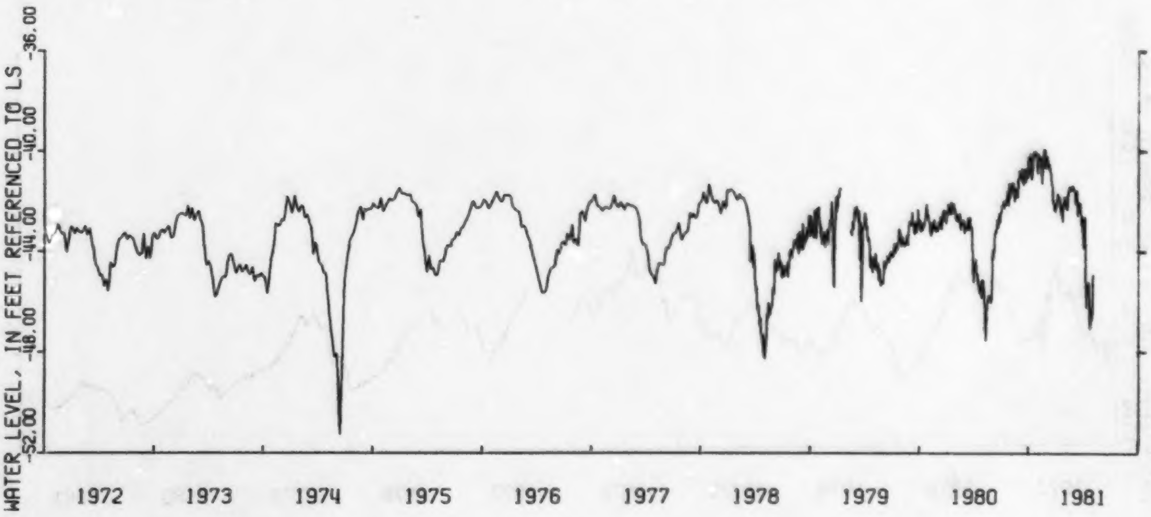
## SARATOGA COUNTY

430327073475401. Local number, Sa 529.
LOCATION.--Lat 43°03'27", long 73°47'54", Hydrologic Unit 02020003, at Saratoga Springs.
Owner: Saratoga Springs Authority, New York State.
AQUIFER.--Confined aquifer in dolomite of Ordovician age.
WELL CHARACTERISTICS. -Drilled unused well, diameter 6 in. (0.15 m), depth 304 ft (92.6 m), cased to 189 ft (57.6 m), open hole.
DATUM.--Altitude of land-surface datum is 305 ft (93 m), from topographic map. Measuring point: Top of casing, 3.38 ft (1.028 m) above land-surface datum.
REMARKS.--Water level affected by earthquakes and distant pumping.
PERIOD OF RECORD.--May 1949 to November 1961, August 1964 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 39.70 ft (12.10 m) below land-surface datum, Jan. 7, 1981; lowest, 56.20 ft (17.13 m) below land-surface datum, July 29, 1949.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 42.27 | 41.43 | 40.82 | 40.90 | 40.55 | 40.23 | 42.14 | 42.24 | 41.61 | 43.81 | 45.12 | |
| 2 | 42.17 | 41.65 | 40.86 | 40.58 | 40.09 | 40.16 | 41.91 | 41.99 | 41.59 | 43.84 | 44.90 | |
| 3 | 42.19 | 41.60 | 40.95 | 40.76 | 40.29 | 40.19 | 41.95 | 41.91 | 41.70 | 43.65 | --- | |
| 4 | 42.09 | 41.24 | 41.09 | 40.48 | 40.34 | 40.33 | 41.87 | 41.86 | 41.95 | 42.87 | --- | |
| 5 | 42.17 | 41.22 | 41.11 | 40.29 | 40.49 | 40.35 | 41.70 | 41.79 | 42.11 | 42.59 | --- | |
| 6 | 42.10 | 41.38 | 41.13 | 40.07 | 40.53 | 40.50 | 41.65 | 41.91 | 41.79 | 42.73 | --- | |
| 7 | 41.98 | 41.33 | 40.96 | 40.28 | 40.53 | 40.62 | 41.73 | 42.13 | 41.82 | 43.11 | --- | |
| 8 | 41.95 | 41.37 | 40.67 | 40.86 | 40.18 | 40.73 | 41.81 | 42.32 | 41.84 | 44.33 | --- | |
| 9 | 42.07 | 41.43 | 40.77 | 41.11 | 40.27 | 40.62 | 41.87 | 42.07 | 41.52 | 44.93 | --- | |
| 10 | 42.27 | 41.23 | 41.12 | 41.02 | 40.63 | 40.49 | 42.09 | 41.81 | 41.75 | 45.49 | --- | |
| 11 | 41.98 | 41.24 | 41.22 | 40.89 | 40.40 | 40.51 | 41.79 | 41.65 | 42.20 | 46.04 | --- | |
| 12 | 41.98 | 41.64 | 41.11 | 40.58 | 40.93 | 40.77 | 41.81 | 41.48 | 42.56 | 46.21 | --- | |
| 13 | 41.95 | 41.99 | 41.16 | 40.36 | 41.28 | 40.78 | 41.93 | 41.53 | 42.44 | 45.28 | --- | |
| 14 | 42.00 | 41.74 | 41.33 | 40.29 | 40.93 | 40.87 | 41.99 | 41.50 | 42.32 | 45.40 | --- | |
| 15 | 42.12 | 41.78 | 41.02 | 40.25 | 40.75 | 40.86 | 42.11 | 41.46 | 42.20 | 45.54 | --- | |
| 16 | 42.12 | 41.77 | 40.76 | 40.16 | 40.47 | 41.01 | 42.38 | 41.39 | 42.00 | 45.53 | --- | |
| 17 | 42.08 | 41.80 | 40.99 | 40.14 | 40.25 | 41.29 | 42.46 | 41.48 | 42.12 | 45.54 | --- | |
| 18 | 41.78 | 41.43 | 40.67 | 39.98 | 40.20 | 41.36 | 42.52 | 41.55 | 42.22 | 45.30 | --- | |
| 19 | 41.64 | 41.55 | 40.70 | 39.97 | 40.11 | 41.29 | 42.31 | 41.51 | 42.13 | 45.17 | --- | |
| 20 | 41.55 | 41.64 | 41.19 | 40.13 | 39.90 | 41.45 | 42.13 | 41.56 | 42.08 | 45.32 | --- | |
| 21 | 41.59 | 41.61 | 41.23 | 40.18 | 40.03 | 41.93 | 42.61 | 41.53 | 42.05 | 46.08 | --- | |
| 22 | 41.84 | 41.66 | 41.07 | 39.97 | 40.57 | 42.09 | 42.80 | 41.41 | 42.07 | 46.65 | --- | |
| 23 | 42.11 | 41.83 | 40.79 | 39.96 | 40.25 | 41.92 | 42.48 | 41.44 | 42.92 | 46.93 | --- | |
| 24 | 42.14 | 41.39 | 40.76 | 40.06 | 39.88 | 41.96 | 41.98 | 41.40 | 42.93 | 47.01 | --- | |
| 25 | 41.59 | 41.07 | 40.65 | 40.19 | 40.06 | 42.13 | 41.98 | 41.36 | 42.65 | 46.83 | --- | |
| 26 | 41.25 | 41.59 | 40.72 | 40.03 | 40.45 | 42.33 | 41.98 | 41.34 | 42.60 | 46.18 | --- | |
| 27 | 41.58 | 41.31 | 40.84 | 40.19 | 40.66 | 42.26 | 41.85 | 41.33 | 42.69 | 46.53 | --- | |
| 28 | 41.53 | 40.95 | 41.04 | 40.42 | 40.38 | 42.40 | 41.80 | 41.43 | 42.58 | 46.67 | --- | |
| 29 | 41.70 | 40.75 | 40.48 | 40.77 | --- | 42.18 | 41.80 | 41.54 | 42.99 | 46.26 | --- | |
| 30 | 41.85 | 40.85 | 40.18 | 40.86 | --- | 42.03 | 42.16 | 41.53 | 43.44 | 46.69 | --- | |
| 31 | 41.61 | --- | 40.74 | 40.79 | --- | 42.29 | --- | 41.47 | --- | 46.28 | --- | |

WTR YEAR 1981 HIGHEST 39.70 Jan. 7, 1981 LOWEST 47.06 Jul. 24, 1981



## SARATOGA COUNTY

430013073370401. Local number, Sa 1072.

LOCATION.--Lat 43°00'13", long 73°37'04", Hydrologic Unit 02020003, Saratoga National Historical Park near Stillwater. Owner: U.S. National Park Service.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in. (0.15 m), depth 20 ft (6.1 m), filled in from original depth of 24 ft (7.3 m), cased to 21 ft (6.4 m), 2-in. (0.05-m) well point (30-gauze screen 21 ft or 6.4 m to 24 ft or 7.3 m).

DATUM.--Altitude of land-surface datum is 224 ft (68 m), from topographic map. Measuring point: Top of casing, 3.31 ft (1.007 m) above land-surface datum.

REMARKS.--Water level affected by adjacent well pumping.

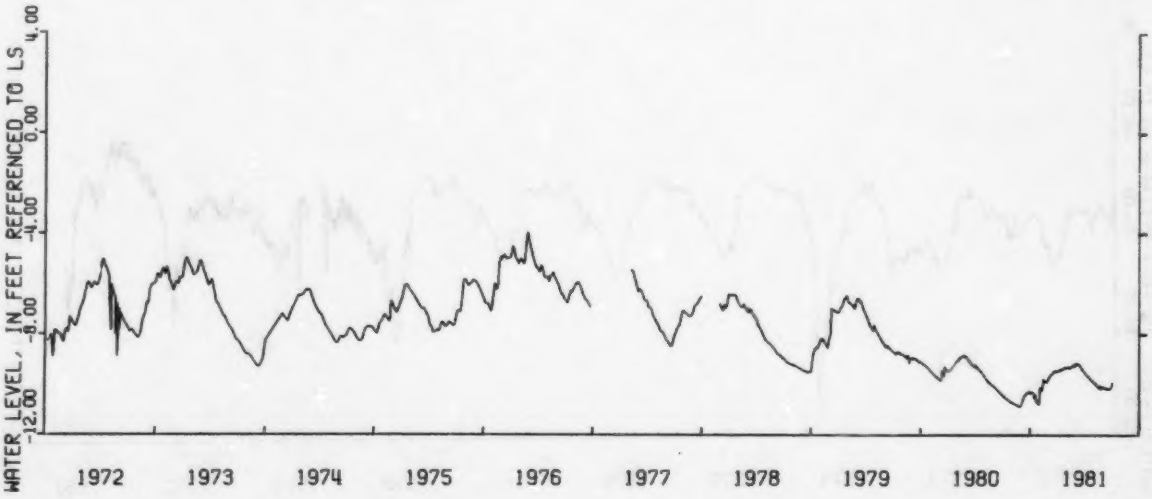
PERIOD OF RECORD.--July 1969 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.94 ft (1.20 m) below land-surface datum, May 25, 1976; lowest, 11.91 ft (3.63 m) below land-surface datum, Oct. 8, 1965.

### WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
### MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 10.42 | 10.71 | 10.79 | 10.30 | 10.19 | 9.69 | 9.43 | 9.34 | 9.15 | 9.53 | 9.96 | 10.10 |
| 2 | 10.49 | 10.77 | 10.71 | 10.28 | 10.10 | 9.73 | 9.43 | 9.31 | 9.23 | 9.50 | 9.91 | 10.14 |
| 3 | 10.46 | 10.72 | 10.67 | 10.37 | 10.24 | 9.65 | 9.46 | 9.30 | 9.17 | 9.61 | 9.99 | 10.09 |
| 4 | 10.51 | 10.79 | 10.67 | 10.29 | 10.13 | 9.68 | 9.40 | 9.30 | 9.19 | 9.53 | 9.97 | 10.15 |
| 5 | 10.46 | 10.73 | 10.57 | 10.30 | 10.24 | 9.63 | 9.46 | 9.30 | 9.14 | 9.62 | 10.00 | 10.08 |
| 6 | 10.55 | 10.76 | 10.57 | 10.37 | 10.17 | 9.64 | 9.39 | 9.30 | 9.20 | 9.62 | 10.00 | 10.16 |
| 7 | 10.48 | 10.76 | 10.53 | 10.32 | 10.16 | 9.58 | 9.45 | 9.33 | 9.14 | 9.64 | 9.92 | 10.14 |
| 8 | 10.56 | 10.77 | 10.47 | 10.34 | 10.16 | 9.63 | 9.41 | 9.27 | 9.23 | 9.63 | 10.03 | 10.17 |
| 9 | 10.50 | 10.77 | 10.45 | 10.34 | 10.18 | 9.56 | 9.42 | 9.37 | 9.15 | 9.67 | 10.08 | 10.13 |
| 10 | 10.58 | 10.80 | 10.44 | 10.33 | 9.80 | 9.60 | 9.37 | 9.30 | 9.23 | 9.60 | 10.00 | 10.18 |
| 11 | 10.57 | 10.76 | 10.41 | 10.37 | 9.77 | 9.54 | 9.42 | 9.37 | 9.18 | 9.67 | 10.07 | 10.11 |
| 12 | 10.60 | 10.77 | 10.43 | 10.38 | 9.89 | 9.59 | 9.36 | 9.35 | 9.25 | 9.71 | 10.04 | 10.18 |
| 13 | 10.55 | 10.79 | 10.38 | 10.55 | 9.89 | 9.52 | 9.39 | 9.35 | 9.21 | 9.71 | 10.09 | 10.11 |
| 14 | 10.61 | 10.84 | 10.40 | 10.46 | 9.86 | 9.55 | 9.41 | 9.31 | 9.31 | 9.67 | 10.10 | 10.20 |
| 15 | 10.57 | 10.79 | 10.36 | 10.40 | 9.87 | 9.49 | 9.35 | 9.30 | 9.25 | 9.75 | 10.04 | 10.15 |
| 16 | 10.61 | 10.80 | 10.35 | 10.45 | 9.85 | 9.55 | 9.33 | 9.29 | 9.33 | 9.73 | 10.10 | 10.17 |
| 17 | 10.58 | 10.86 | 10.35 | 10.46 | 9.87 | 9.47 | 9.41 | 9.25 | 9.29 | 9.76 | 10.19 | 10.12 |
| 18 | 10.66 | 10.80 | 10.31 | 10.43 | 9.88 | 9.49 | 9.33 | 9.26 | 9.37 | 9.73 | 10.01 | 10.19 |
| 19 | 10.61 | 10.83 | 10.32 | 10.69 | 9.88 | 9.50 | 9.39 | 9.24 | 9.41 | 9.81 | 10.10 | 10.13 |
| 20 | 10.68 | 10.83 | 10.33 | 10.63 | 9.86 | 9.44 | 9.36 | 9.23 | 9.34 | 9.81 | 10.05 | 10.20 |
| 21 | 10.63 | 10.86 | 10.31 | 10.69 | 9.86 | 9.49 | 9.31 | 9.18 | 9.41 | 9.83 | 10.10 | 10.15 |
| 22 | 10.67 | 10.85 | 10.30 | 10.73 | 9.83 | 9.43 | 9.37 | 9.26 | 9.42 | 9.77 | 10.06 | 10.19 |
| 23 | 10.64 | 10.85 | 10.30 | 10.67 | 9.92 | 9.50 | 9.37 | 9.16 | 9.36 | 9.82 | 10.11 | 10.18 |
| 24 | 10.67 | 10.86 | 10.29 | 10.66 | 9.84 | 9.43 | 9.29 | 9.29 | 9.45 | 9.86 | 10.20 | 10.19 |
| 25 | 10.71 | 10.82 | 10.27 | 10.69 | 9.82 | 9.47 | 9.36 | 9.19 | 9.40 | 9.86 | 10.13 | 10.11 |
| 26 | 10.66 | 10.91 | 10.35 | 10.78 | 9.80 | 9.42 | 9.30 | 9.29 | 9.47 | 9.88 | 10.08 | 10.14 |
| 27 | 10.67 | 10.84 | 10.27 | 10.70 | 9.74 | 9.48 | 9.34 | 9.18 | 9.43 | 9.83 | 10.12 | 10.12 |
| 28 | 10.73 | 10.87 | 10.27 | 10.80 | 9.79 | 9.42 | 9.32 | 9.27 | 9.53 | 9.92 | 10.05 | 10.01 |
| 29 | 10.68 | 10.84 | 10.30 | 10.76 | --- | 9.48 | 9.31 | 9.15 | 9.50 | 9.89 | 10.13 | 10.02 |
| 30 | 10.69 | 10.79 | 10.30 | 10.40 | --- | 9.44 | 9.27 | 9.21 | 9.55 | 9.94 | 10.06 | 9.90 |
| 31 | 10.76 | --- | 10.30 | 10.12 | --- | 9.42 | --- | 9.13 | --- | 9.87 | 10.14 | --- |

WTR YEAR 1981 HIGHEST 9.11 Jun. 4, 6, 1981 LOWEST 11.02 Nov. 26, 1980



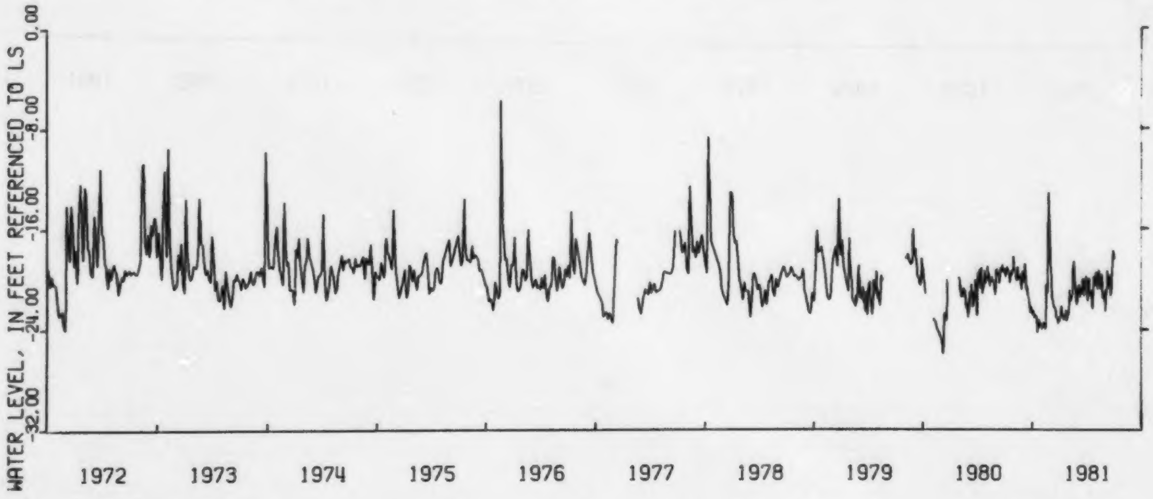
## SCHENECTADY COUNTY

424910073591401. Local number, Sn 363.
LOCATION.--Lat 42°49'10", long 73°59'14", Hydrologic Unit 02020004, in Schenectady.
Owner: City of Schenectady.
AQUIFER.--Water-table aquifer in sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in. (0.15 m), depth 54 ft (16.4 m), filled in from original depth of 57 ft (17.4 m), cased to 57 ft (17.4 m), open end.
DATUM.--Land-surface datum is 228.50 ft (69.647 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.47 ft (0.753 m) above land-surface datum.
REMARKS.--Water level affected by stage of Mohawk River, and by pumping (average 18.6 Mgal/d or 70,400 $m^3$/d in 1980) from adjacent municipal well field.
PERIOD OF RECORD.--June 1960 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.62 ft (1.10 m) below land-surface datum, Dec. 27, 1973; lowest, 31.27 ft (9.53 m) below land-surface datum, Feb. 10, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 19.57 | 19.39 | 20.02 | 22.54 | 23.72 | 18.80 | 23.06 | 21.62 | 20.76 | 21.69 | 19.80 | 21.13 |
| 2 | 19.87 | 19.44 | 20.27 | 22.80 | 23.83 | 19.22 | 22.90 | 21.21 | 20.95 | 21.73 | 20.10 | 21.30 |
| 3 | 19.27 | 19.39 | 19.45 | 22.59 | 23.77 | 20.03 | 22.48 | 20.90 | 20.49 | 21.27 | 20.47 | 21.20 |
| 4 | 19.64 | 19.36 | 18.80 | 22.92 | 23.44 | 20.59 | 22.17 | 21.42 | 20.76 | 20.58 | 20.78 | 20.20 |
| 5 | 19.17 | 19.51 | 18.85 | 23.10 | 23.55 | 21.10 | 22.19 | 21.67 | 20.92 | 19.94 | 20.21 | 19.32 |
| 6 | 19.34 | 19.89 | 19.17 | 23.07 | 23.56 | 21.56 | 22.34 | 21.80 | 21.42 | 20.67 | 19.64 | 19.67 |
| 7 | 19.02 | 20.14 | 19.49 | 23.02 | 23.64 | 21.64 | 22.71 | 21.63 | 20.71 | 19.92 | 19.76 | 20.20 |
| 8 | 19.54 | 19.97 | 19.98 | 22.99 | 23.55 | 21.83 | 22.70 | 21.57 | 20.89 | 20.87 | 19.28 | 20.70 |
| 9 | 19.21 | 19.73 | 20.81 | 22.95 | 23.68 | 21.90 | 23.06 | 21.24 | 20.93 | 20.95 | 19.38 | 20.53 |
| 10 | 19.30 | 19.09 | 20.54 | 22.92 | 24.02 | 22.25 | 22.98 | 21.42 | 21.16 | 21.29 | 19.89 | 20.16 |
| 11 | 19.53 | 19.21 | 20.91 | 22.96 | 23.91 | 22.12 | 23.23 | 21.15 | 21.05 | 21.29 | 20.04 | 20.35 |
| 12 | 19.31 | 19.55 | 20.68 | 23.01 | 23.42 | 22.27 | 22.90 | 21.25 | 21.19 | 21.20 | 20.22 | 19.90 |
| 13 | 19.50 | 19.99 | 21.31 | 23.24 | 21.57 | 22.23 | 23.04 | 19.46 | 20.66 | 21.00 | 20.26 | 19.63 |
| 14 | 20.11 | 20.08 | 20.85 | 23.95 | 20.46 | 22.30 | 23.03 | 19.12 | 20.34 | 20.88 | 20.84 | 20.29 |
| 15 | 20.20 | 19.76 | 21.28 | 24.27 | 20.49 | 22.27 | 23.19 | 18.96 | 19.96 | 21.30 | 20.33 | 20.69 |
| 16 | 20.33 | 19.72 | 21.30 | 23.95 | 20.48 | 22.33 | 23.25 | 19.12 | 20.30 | 21.99 | 20.29 | 20.86 |
| 17 | 20.22 | 19.68 | 21.52 | 23.64 | 21.07 | 22.62 | 23.00 | 18.61 | 20.59 | 22.18 | 20.01 | 21.30 |
| 18 | 19.76 | 19.70 | 21.75 | 23.78 | 21.11 | 22.56 | 23.27 | 18.60 | 20.26 | 22.35 | 19.58 | 20.96 |
| 19 | 19.65 | 20.05 | 21.99 | 23.26 | 20.36 | 23.10 | 22.87 | 19.35 | 20.85 | 21.77 | 19.76 | 20.57 |
| 20 | 19.36 | 19.71 | 21.95 | 23.86 | 17.35 | 22.95 | 22.47 | 20.01 | 21.35 | 21.02 | 20.77 | 19.96 |
| 21 | 19.38 | 20.40 | 22.15 | 23.67 | 13.53 | 23.06 | 22.97 | 20.50 | 20.43 | 20.13 | 21.50 | 19.61 |
| 22 | 19.42 | 20.53 | 22.67 | 23.84 | 13.11 | 23.03 | 22.98 | 20.74 | 20.07 | 19.78 | 21.28 | 19.70 |
| 23 | 19.66 | 20.78 | 22.45 | 23.55 | 14.49 | 23.11 | 23.36 | 21.16 | 20.02 | 19.81 | 21.03 | 18.42 |
| 24 | 19.33 | 20.88 | 22.28 | 23.45 | 15.53 | 23.41 | 23.05 | 21.01 | 20.75 | 20.37 | 21.38 | 17.70 |
| 25 | 19.58 | 20.25 | 22.22 | 23.62 | 14.85 | 23.21 | 23.13 | 21.54 | 20.34 | 20.54 | 21.12 | 17.75 |
| 26 | 19.33 | 19.66 | 22.30 | 23.70 | 15.62 | 23.59 | 22.61 | 22.04 | 20.41 | 20.23 | 21.51 | 18.23 |
| 27 | 18.20 | 19.38 | 22.36 | 23.62 | 17.07 | 23.26 | 22.55 | 21.78 | 19.74 | 20.15 | 21.83 | 17.89 |
| 28 | 18.46 | 19.95 | 22.76 | 23.68 | 17.77 | 23.23 | 22.93 | 21.92 | 20.48 | 20.53 | 21.19 | 18.08 |
| 29 | 18.78 | 20.19 | 22.57 | 23.65 | --- | 23.17 | 22.70 | 21.54 | 20.48 | 19.55 | 22.61 | 18.22 |
| 30 | 19.24 | 19.86 | 22.56 | 24.03 | --- | 23.37 | 22.65 | 20.77 | 21.33 | 19.54 | 21.87 | 18.36 |
| 31 | 19.08 | --- | 22.87 | 23.75 | --- | 23.06 | --- | 20.55 | --- | 19.43 | 20.87 | --- |

WTR YEAR 1981 HIGHEST 12.45 Feb. 22, 1981 LOWEST 24.38 Jan. 15, 16, 1981

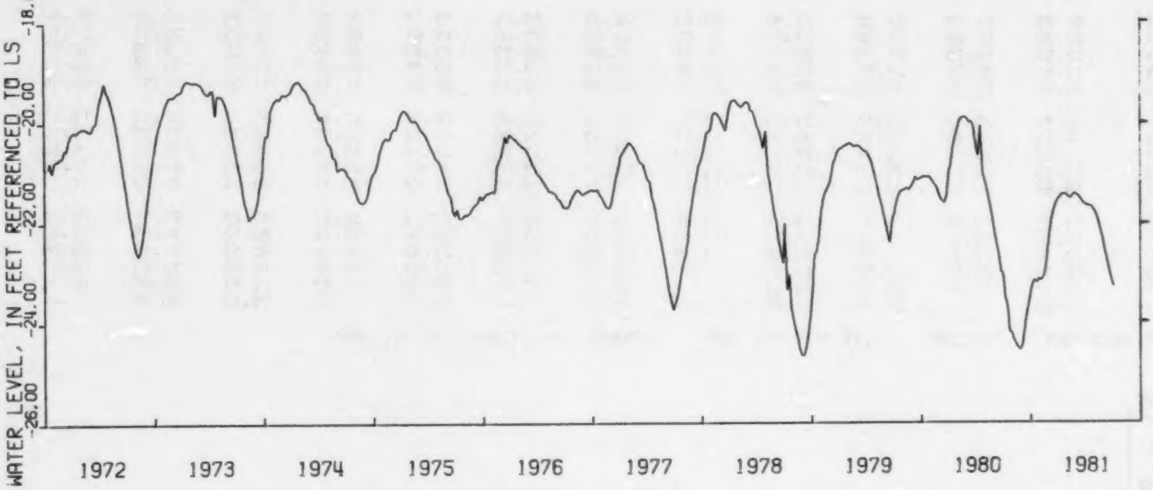


## ULSTER COUNTY

414425074213601. Local number, U 204.
LOCATION.--Lat 41°44'25", long 74°21'36", Hydrologic Unit 02020007, near Napanoch.
Owner: New York State Department of Correction.
AQUIFER.--Water-table aquifer in deposits of Pleistocene age.
WELL CHARACTERISTICS.--Drilled unused well, diameter 8 in. (0.20 m), depth 46 ft (14.0 m), cased to unknown depth, filled in from original depth of 67 ft (20.4 m).
DATUM.--Altitude of land-surface datum is 300 ft (91 m), from topographic map. Measuring point: Top of casing, 1.00 ft (0.305 m) above land-surface datum.
PERIOD OF RECORD.--October 1954 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.84 ft (5.13 m) below land-surface datum, Mar. 24, 1955: lowest measured, 26.90 ft (8.20 m) below land-surface datum, Dec. 29, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|---|---|---|---|---|---|---|---|
| OCT 07, 1980 | 23.50 | JAN 06, 1981 | 23.21 | APR 07, 1981 | 21.50 | JUL 21, 1981 | 21.71 |
| 14 | 23.70 | 13 | 23.15 | 14 | 21.45 | 28 | 21.77 |
| 21 | 24.20 | 20 | 23.21 | 21 | 21.45 | AUG 05 | 21.86 |
| 28 | 24.20 | 27 | 23.13 | 28 | 21.46 | 11 | 21.97 |
| NOV 04 | 24.34 | FEB 03 | 23.16 | MAY 06 | 21.51 | 18 | 22.13 |
| 11 | 24.43 | 11 | 23.08 | 12 | 21.53 | 25 | 22.31 |
| 18 | 24.51 | 17 | 22.92 | 19 | 21.46 | SEP 01 | 22.55 |
| 25 | 24.55 | 24 | 22.58 | 26 | 21.43 | 08 | 22.72 |
| DEC 02 | 24.46 | MAR 04 | 22.15 | JUN 09 | 21.50 | 22 | 23.10 |
| 09 | 24.17 | 10 | 21 91 | 16 | 21.57 | 29 | 23.28 |
| 16 | 23.85 | 17 | 21.74 | 23 | 21.63 | | |
| 23 | 23.60 | 24 | 21.63 | JUL 07 | 21.68 | | |
| 30 | 23.37 | 31 | 21.54 | 14 | 21.68 | | |

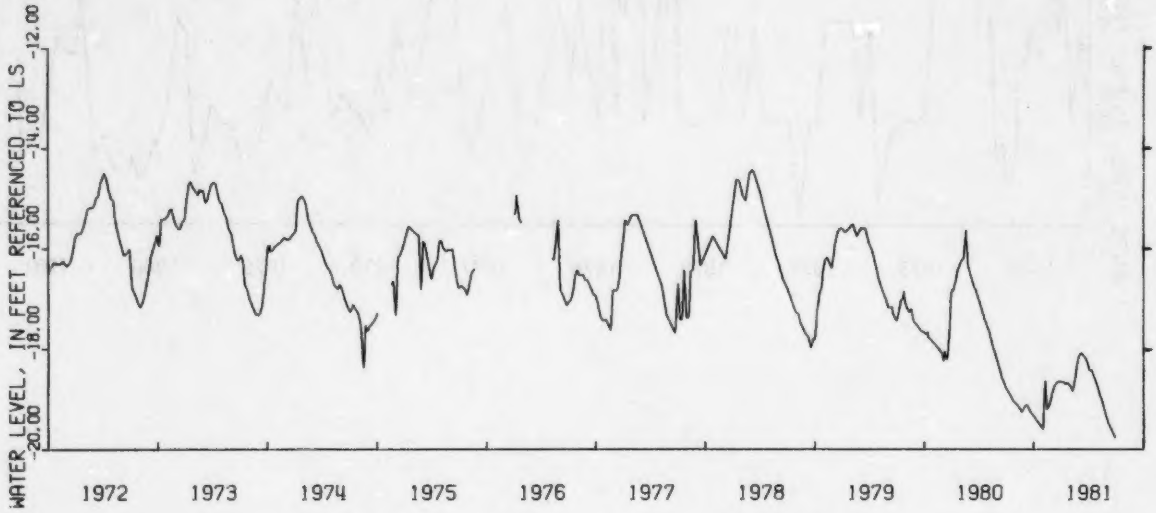


## ULSTER COUNTY

414948074035101. Local number, U 405.
LOCATION.--Lat 41°49'48", long 74°03'51" Hydrologic Unit 02020007, Grist Mill Road, Tillson.
Owner: City School District of Kingston.
AQUIFER.--Water-table aquifer in sand of Pleistocene age.
WELL CHARACTERISTICS.--Bored observation well, diameter 2.5 in. (0.06 m), depth 36 ft (11.0 m), cased to 34 ft (10.4 m), 2-in. (0.05-m) well point (60-gauze screen 34 ft or 10.4 m to 36 ft or 11.0 m).
DATUM.--Altitude of land-surface datum is 240 ft (73 m), from topographic map. Measuring point: Top of casing, 0.47 ft (0.143 m) above land-surface datum.
REMARKS.--Originally a dug well, diameter 36 in. (0.91 m), depth 21 ft (6.4 m), stone-lined. Well deepened by power auger, October 1965.
PERIOD OF RECORD.--October 1964 to July 1965, March 1966 to December 1974, April 1976 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.43 ft (4.40 m) below land-surface datum, June 3, 1978: lowest measured, 20.71 ft (6.31 m) below land-surface datum, Jan. 24, 1967.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|---|---|---|---|---|---|---|---|
| OCT 04, 1980 | 18.83 | JAN 03, 1981 | 19.36 | APR 11, 1981 | 18.67 | JUL 11, 1981 | 18.43 |
| 11 | 18.90 | 10 | 19.42 | 13 | 18.69 | 15 | 18.51 |
| 18 | 18.98 | 17 | 19.49 | 18 | 18.68 | 18 | 18.55 |
| 25 | 19.05 | 22 | 19.53 | 25 | 18.69 | 25 | 18.65 |
| 30 | 19.08 | 24 | 19.54 | MAY 02 | 18.76 | AUG 01 | 18.77 |
| NOV 01 | 19.08 | 31 | 19.60 | 09 | 18.84 | 08 | 18.91 |
| 08 | 19.14 | FEB 07 | 18.63 | 16 | 18.59 | 15 | 19.05 |
| 15 | 19.20 | 14 | 19.21 | 23 | 18.30 | 22 | 19.20 |
| 22 | 19.26 | 21 | 19.11 | 26 | 18.21 | 29 | 19.34 |
| 29 | 19.17 | 28 | 18.91 | 30 | 18.13 | SEP 05 | 19.48 |
| DEC 06 | 19.12 | MAR 07 | 18.77 | JUN 06 | 18.07 | 12 | 19.56 |
| 08 | 19.12 | 14 | 18.69 | 13 | 18.14 | 19 | 19.67 |
| 13 | 19.17 | 21 | 18.65 | 20 | 18.18 | 26 | 19.76 |
| 20 | 19.26 | 28 | 18.65 | 27 | 18.28 | | |
| 27 | 19.31 | APR 04 | 18.65 | JUL 04 | 18.43 | | |

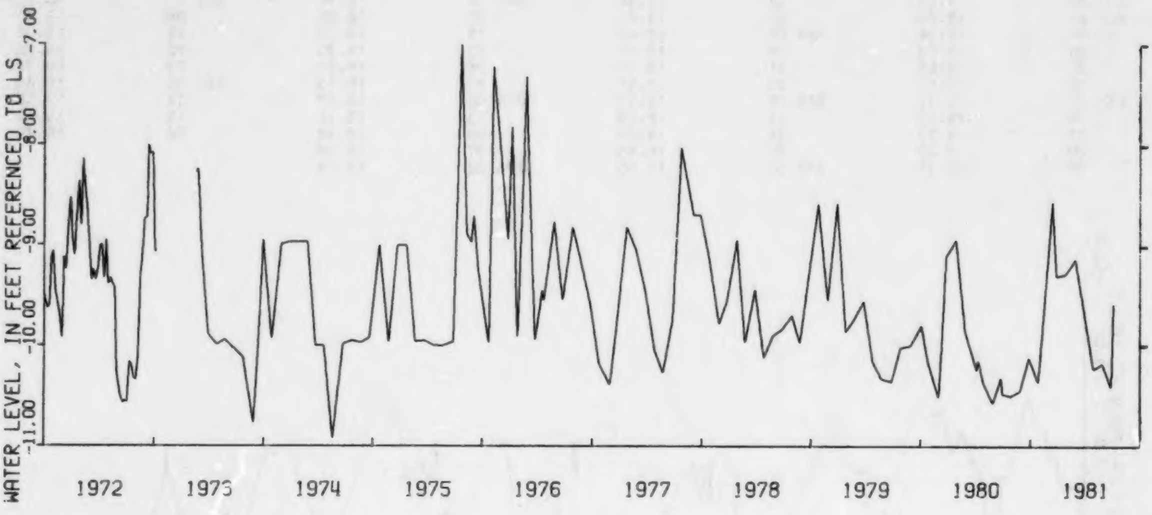


## WASHINGTON COUNTY

431026073194101. Local number, W 264.
LOCATION.--Lat 43°10'26", long 73°19'41", Hydrologic Unit 02020003, in Salem.
Owner: Village of Salem.
AQUIFER.--Water-table aquifer in gravel of Pleistocene age.
WELL CHARACTERISTICS.--Dug fire-protection well, approximate size 8 ft (2.4 m) by 12 ft (3.7 m), depth 14 ft (4.3 m), filled in from original depth of 15 ft (4.6 m), stone-lined.
DATUM.--Land-surface datum is 485.5 ft (147.98 m) National Geodetic Vertical Datum of 1929. Measuring point: Top edge of concrete cover at east side of square opening, 0.30 ft (0.091 m) above land-surface datum.
REMARKS.--Water level affected by stage of nearby stream.
PERIOD OF RECORD.--July 1946 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 6.62 ft (2.02 m) below land-surface datum, Apr. 4, 1960; lowest measured 11.70 ft (3.57 m) below land-surface datum, Oct. 12, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|---|---|---|---|---|---|---|---|
| OCT 22, 1980 | 10.50 | JAN 23, 1981 | 10.36 | APR 23, 1981 | 9.29 | AUG 24, 1981 | 10.18 |
| NOV 24 | 10.45 | MAR 10 | 8.57 | MAY 26 | 9.14 | SEP 23 | 10.41 |
| DEC 22 | 10.12 | 23 | 9.31 | JUL 25 | 10.23 | 30 | 9.59 |



## WASHINGTON COUNTY

431030073192101. Local number, W 533.

LOCATION.--Lat 43°10'30", long 73°19'21", Hydrologic Unit 02020003, in Salem.
Owner: Salem Central High School.

AQUIFER.--Water-table aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in. (0.15 m), depth 15 ft (4.6 m), cased to 16 ft (4.9 m), open end. Well backfilled 1.6 ft (0.48 m) with coarse gravel.

DATUM.--Altitude of land-surface datum is 490 ft (149 m), from topographic map. Measuring point: Top of casing, 3.10 ft (0.945 m) above land-surface datum.

REMARKS.--Well was drilled March 1974 as a replacement for 431032073192401 (local number W 532), located 350 ft (107 m) northwest, which has a period of record from October 1965 to June 1973 (unpublished).

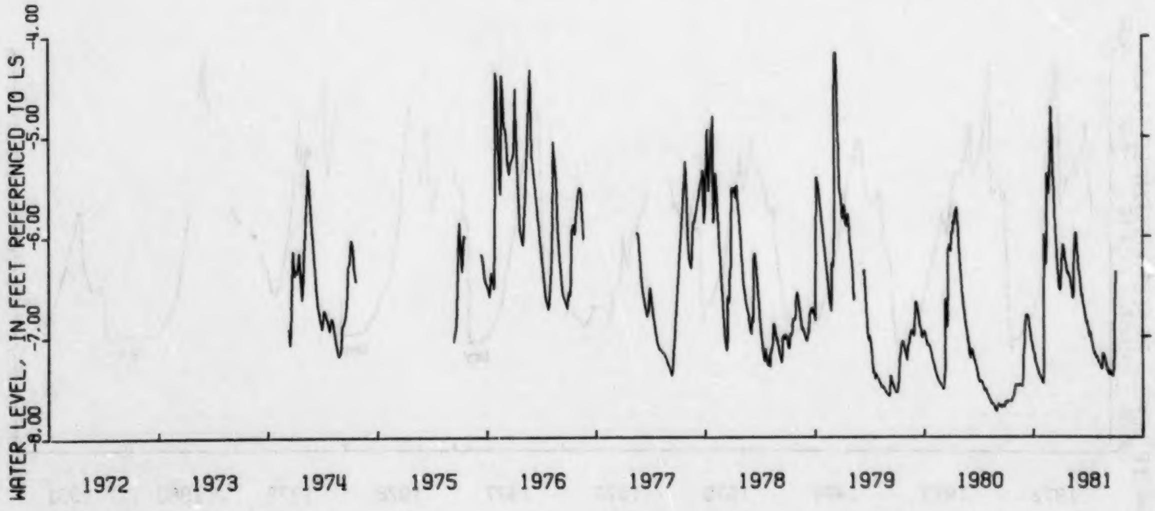
PERIOD OF RECORD.--March 1974 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 3.99 ft (1.22 m) below land-surface datum, Jan. 29, 1976; lowest recorded, 7.75 ft (2.36 m) below land-surface datum, Aug. 26, 27-29, 30, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 7.66 | 7.48 | 6.89 | 7.18 | 7.47 | 4.85 | 6.40 | 6.42 | 6.36 | 6.94 | 7.23 | 7.33 |
| 2 | 7.66 | 7.48 | 6.86 | 7.19 | 6.86 | 4.94 | 6.32 | 6.44 | 6.40 | 6.96 | 7.24 | 7.34 |
| 3 | 7.67 | 7.48 | 6.83 | 7.21 | 5.99 | 5.05 | 6.25 | 6.45 | 6.43 | 6.98 | 7.25 | 7.35 |
| 4 | 7.66 | 7.48 | 6.80 | 7.23 | 6.02 | 5.16 | 6.21 | 6.48 | 6.46 | 7.00 | 7.26 | 7.36 |
| 5 | 7.64 | 7.48 | 6.79 | 7.25 | 6.08 | 5.26 | 6.21 | 6.50 | 6.50 | 7.01 | 7.27 | 7.36 |
| 6 | 7.64 | 7.49 | 6.79 | 7.27 | 6.14 | 5.36 | 6.14 | 6.52 | 6.53 | 6.97 | 7.26 | 7.37 |
| 7 | 7.64 | 7.49 | 6.79 | 7.28 | 6.19 | 5.47 | 6.11 | 6.55 | 6.56 | 6.96 | 7.27 | 7.37 |
| 8 | 7.64 | 7.49 | 6.80 | 7.29 | 6.21 | 5.57 | 6.09 | 6.57 | 6.59 | 6.98 | 7.28 | 7.38 |
| 9 | 7.64 | 7.50 | 6.79 | 7.30 | 6.24 | 5.65 | 6.10 | 6.60 | 6.61 | 7.01 | 7.29 | 7.34 |
| 10 | 7.64 | 7.48 | 6.79 | 7.30 | 6.29 | 5.73 | 6.13 | 6.62 | 6.58 | 7.02 | 7.30 | 7.34 |
| 11 | 7.64 | 7.48 | 6.80 | 7.31 | 5.95 | 5.79 | 6.15 | 6.63 | 6.61 | 7.04 | 7.31 | 7.35 |
| 12 | 7.64 | 7.48 | 6.82 | 7.33 | 5.39 | 5.85 | 6.17 | 6.58 | 6.63 | 7.06 | 7.32 | 7.36 |
| 13 | 7.64 | 7.48 | 6.84 | 7.33 | 5.38 | 5.91 | 6.21 | 6.32 | 6.66 | 7.07 | 7.32 | 7.37 |
| 14 | 7.64 | 7.48 | 6.86 | 7.35 | 5.43 | 5.97 | 6.23 | 6.22 | 6.68 | 7.09 | 7.33 | 7.38 |
| 15 | 7.64 | 7.48 | 6.89 | 7.36 | 5.50 | 6.02 | 6.24 | 6.17 | 6.70 | 7.10 | 7.31 | 7.38 |
| 16 | 7.65 | 7.48 | 6.91 | 7.37 | 5.56 | 6.06 | 6.26 | 6.11 | 6.71 | 7.12 | 7.22 | 7.38 |
| 17 | 7.65 | 7.49 | 6.93 | 7.38 | 5.57 | 6.12 | 6.28 | 6.05 | 6.73 | 7.13 | 7.19 | 7.39 |
| 18 | 7.65 | 7.49 | 6.95 | 7.38 | 5.58 | 6.17 | 6.29 | 6.01 | 6.75 | 7.15 | 7.17 | 7.39 |
| 19 | 7.63 | 7.49 | 6.98 | 7.39 | 5.59 | 6.22 | 6.31 | 5.98 | 6.77 | 7.16 | 7.17 | 7.40 |
| 20 | 7.62 | 7.50 | 7.00 | 7.39 | 5.51 | 6.27 | 6.32 | 5.97 | 6.79 | 7.18 | 7.18 | 7.40 |
| 21 | 7.61 | 7.50 | 7.03 | 7.40 | 5.36 | 6.33 | 6.36 | 5.99 | 6.81 | 7.18 | 7.19 | 7.40 |
| 22 | 7.60 | 7.50 | 7.05 | 7.40 | 5.30 | 6.38 | 6.37 | 6.01 | 6.83 | 7.16 | 7.20 | 7.39 |
| 23 | 7.60 | 7.50 | 7.06 | 7.41 | 5.30 | 6.41 | 6.39 | 6.06 | 6.85 | 7.17 | 7.21 | 7.31 |
| 24 | 7.60 | 7.50 | 7.07 | 7.42 | 5.24 | 6.45 | 6.38 | 6.09 | 6.86 | 7.18 | 7.22 | 7.16 |
| 25 | 7.59 | 7.36 | 7.08 | 7.42 | 5.03 | 6.49 | 6.38 | 6.14 | 6.88 | 7.20 | 7.23 | 6.92 |
| 26 | 7.58 | 7.22 | 7.10 | 7.43 | 4.79 | 6.52 | 6.37 | 6.19 | 6.85 | 7.21 | 7.25 | 6.79 |
| 27 | 7.55 | 7.14 | 7.12 | 7.43 | 4.72 | 6.54 | 6.38 | 6.22 | 6.85 | 7.22 | 7.26 | 6.73 |
| 28 | 7.53 | 7.08 | 7.14 | 7.44 | 4.76 | 6.54 | 6.40 | 6.28 | 6.87 | 7.22 | 7.27 | 6.54 |
| 29 | 7.51 | 7.00 | 7.15 | 7.44 | --- | 6.55 | 6.40 | 6.31 | 6.90 | 7.21 | 7.29 | 6.41 |
| 30 | 7.50 | 6.93 | 7.15 | 7.45 | --- | 6.52 | 6.42 | 6.35 | 6.92 | 7.20 | 7.30 | 6.36 |
| 31 | 7.49 | --- | 7.16 | 7.47 | --- | 6.46 | --- | 6.36 | --- | 7.21 | 7.32 | --- |

WTR YEAR 1981 HIGHEST 4.71 Feb. 27, 1981 LOWEST 7.67 Oct 2, 3, 4, 1980



## WESTCHESTER COUNTY

411421073481201. Local number, We 3.

LOCATION.--Lat 41°14'21", long 73°48'12", Hydrologic Unit 02030101, near Yorktown Heights.
Owner: New York City Board of Water Supply.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused well, diameter 36 in. (0.91 m), depth cleaned out to 16.1 ft (4.91 m) September 23, 1981, original depth reported to be 18.2 ft (5.55 m), filled in to 17.1 ft (5.21 m) as of November 1956, to 16.3 ft (4.97 m) as of June 1971, to 15.5 ft (4.72 m) as of October 1977, to 15.3 ft (4.66 m) as of November 1978, stone lined.

DATUM.--Altitude of land-surface datum is 252.5 ft (76.96 m) National Geodetic Vertical Datum of 1929. Measuring point: Top edge of hole in wooden well cover, 1.13 ft (0.34 m) above land-surface datum.

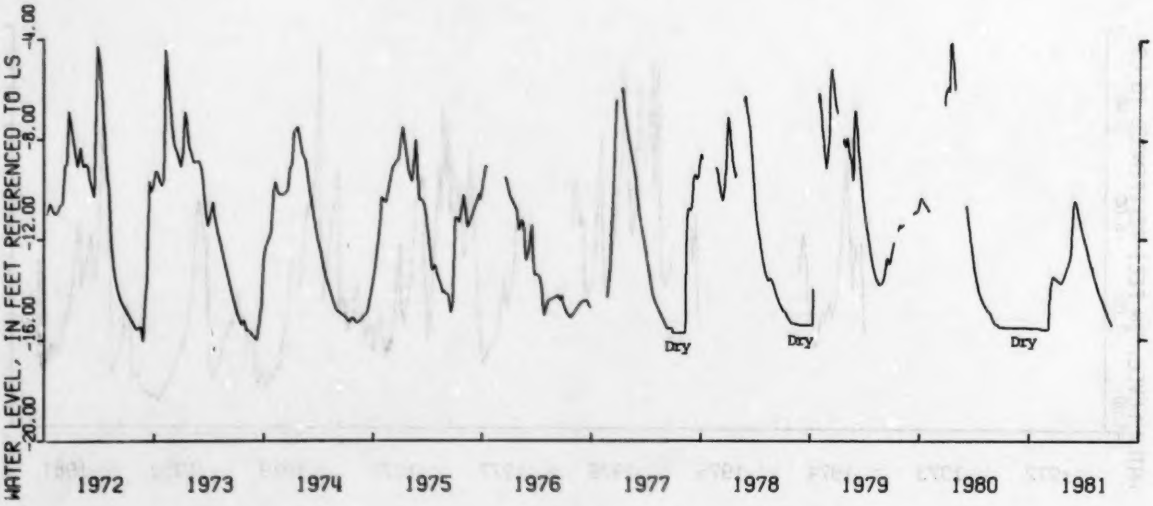
PERIOD OF RECORD.--April 1934 to September 1937, April 1938 to September 1945, March 1951 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.9 ft (1.19 m) below land-surface datum, Apr. 12, 13, 1958· lowest measured, dry Nov. 30, 1935, Jan. 7, 1936, Feb. 1, 1936, Jan. 6 to Feb. 4, 1965, Nov. 12, 1970, Sept. 10 to Nov. 9, 1977, Oct. 30 to Nov. 7, 1978, Nov. 28, 1978 to Jan. 8, 1979, Sept. 6 to 30, 1980, Oct. 1, 1980 to Mar. 3, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | DRY | 13.59 | 13.24 | 10.48 | 12.00 | 13.42 | 14.50 |
| 2 | | | | | | DRY | 13.59 | 13.20 | 10.50 | 12.05 | 13.45 | 14.52 |
| 3 | | | | | | DRY | 13.62 | 13.18 | 10.53 | 12.09 | 13.49 | 14.56 |
| 4 | | | | | | 15.16 | 13.62 | 13.15 | 10.54 | 12.13 | 13.53 | 14.59 |
| 5 | | | | | | 14.82 | 13.62 | 13.11 | 10.59 | 12.15 | 13.57 | 14.63 |
| 6 | | | | | | 14.57 | 13.64 | 13.07 | 10.61 | 12.19 | 13.61 | 14.69 |
| 7 | | | | | | 14.38 | 13.67 | 13.05 | 10.67 | 12.24 | 13.64 | 14.73 |
| 8 | | | | | | 14.24 | 13.67 | 13.03 | 10.82 | 12.28 | 13.69 | 14.75 |
| 9 | | | | | | 14.11 | 13.66 | 12.97 | 10.84 | 12.33 | 13.73 | 14.78 |
| 10 | | | | | | 13.99 | 13.69 | 12.93 | 10.91 | 12.38 | 13.77 | 14.81 |
| 11 | | | | | | 13.89 | 13.67 | 12.88 | 10.98 | 12.43 | 13.81 | 14.83 |
| 12 | | | | | | 13.80 | 13.69 | 12.83 | 11.04 | 12.48 | 13.85 | 14.85 |
| 13 | | | | | | 13.71 | 13.72 | 12.80 | 11.10 | 12.51 | 13.89 | 14.87 |
| 14 | | | | | | 13.65 | 13.69 | 12.74 | 11.15 | 12.56 | 13.93 | 14.89 |
| 15 | | | | | | 13.59 | 13.71 | 12.69 | 11.19 | 12.61 | 13.96 | 14.93 |
| | |——————|——————|—— DRY ——|——————|——————| | | | | | |
| 16 | | | | | | 13.53 | 13.70 | 12.62 | 11.23 | 12.66 | 14.00 | 14.99 |
| 17 | | | | | | 13.49 | 13.64 | 12.55 | 11.28 | 12.72 | 14.04 | 15.04 |
| 18 | | | | | | 13.47 | 13.62 | 12.42 | 11.35 | 12.78 | 14.08 | 15.06 |
| 19 | | | | | | 13.45 | 13.63 | 12.22 | 11.40 | 12.83 | 14.12 | 15.08 |
| 20 | | | | | | 13.44 | 13.59 | 11.95 | 11.44 | 12.87 | 14.16 | 15.10 |
| 21 | | | | | | 13.46 | 13.60 | 11.63 | 11.48 | 12.90 | 14.19 | 15.13 |
| 22 | | | | | | 13.51 | 13.57 | 11.35 | 11.52 | 12.95 | 14.22 | 15.17 |
| 23 | | | | | | 13.49 | 13.52 | 11.22 | 11.59 | 13.01 | 14.24 | --- |
| 24 | | | | | | 13.49 | 13.46 | 11.02 | 11.65 | 13.06 | 14.26 | --- |
| 25 | | | | | | 13.52 | 13.44 | 10.75 | 11.68 | 13.10 | 14.29 | 15.23 |
| 26 | | | | | | 13.54 | 13.44 | 10.63 | 11.74 | 13.14 | 14.32 | 15.26 |
| 27 | | | | | | 13.53 | 13.40 | 10.55 | 11.80 | 13.18 | 14.35 | 15.29 |
| 28 | | | | | | 13.57 | 13.37 | 10.48 | 11.85 | 13.22 | 14.36 | 15.31 |
| 29 | | | | | | 13.55 | 13.32 | 10.44 | 11.89 | 13.06 | 14.40 | 15.35 |
| 30 | | | | | | 13.54 | 13.28 | 10.42 | 11.94 | 13.31 | 14.45 | 15.38 |
| 31 | | | | | | 13.57 | --- | 10.43 | --- | 13.37 | 14.48 | --- |

WTR YEAR 1981 HIGHEST 10.40 May 31, 1981 LOWEST DRY Oct. 1, 1980-Mar. 3, 1981



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October 1, 1978

## FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

| Multiply inch-pound units | By | To obtain SI units |
|---|---|---|
| | *Length* | |
| inches (in) | $2.54\text{x}10^{1}$ | millimeters (mm) |
| | $2.54\text{x}10^{-2}$ | meters (m) |
| feet (ft) | $3.048\text{x}10^{-1}$ | meters (m) |
| miles (mi) | $1.609\text{x}10^{0}$ | kilometers (km) |
| | *Area* | |
| acres | $4.047\text{x}10^{3}$ | square meters (m$^{2}$) |
| | $4.047\text{x}10^{-1}$ | square hectometers (hm$^{2}$) |
| | $4.047\text{x}10^{-3}$ | square kilometers (km$^{2}$) |
| square miles (mi$^{2}$) | $2.590\text{x}10^{0}$ | square kilometers (km$^{2}$) |
| | *Volume* | |
| gallons (gal) | $3.785\text{x}10^{0}$ | liters (L) |
| | $3.785\text{x}10^{0}$ | cubic decimeters (dm$^{3}$) |
| | $3.785\text{x}10^{-3}$ | cubic meters (m$^{3}$) |
| million gallons | $3.785\text{x}10^{3}$ | cubic meters (m$^{3}$) |
| | $3.785\text{x}10^{-3}$ | cubic hectometers (hm$^{3}$) |
| cubic feet (ft$^{3}$) | $2.832\text{x}10^{1}$ | cubic decimeters (dm$^{3}$) |
| | $2.832\text{x}10^{-2}$ | cubic meters (m$^{3}$) |
| cfs-days | $2.447\text{x}10^{3}$ | cubic meters (m$^{3}$) |
| | $2.447\text{x}10^{-3}$ | cubic hectometers (hm$^{3}$) |
| acre-feet (acre-ft) | $1.233\text{x}10^{3}$ | cubic meters (m$^{3}$) |
| | $1.233\text{x}10^{-3}$ | cubic hectometers (hm$^{3}$) |
| | $1.233\text{x}10^{-6}$ | cubic kilometers (km$^{3}$) |
| | *Flow* | |
| cubic feet per second (ft$^{3}$/s) | $2.832\text{x}10^{1}$ | liters per second (L/s) |
| | $2.832\text{x}10^{1}$ | cubic decimeters per second (dm$^{3}$/s) |
| | $2.832\text{x}10^{-2}$ | cubic meters per second (m$^{3}$/s) |
| gallons per minute (gal/min) | $6.309\text{x}10^{-2}$ | liters per second (L/s) |
| | $6.309\text{x}10^{-2}$ | cubic decimeters per second (dm$^{3}$/s) |
| | $6.309\text{x}10^{-5}$ | cubic meters per second (m$^{3}$/s) |
| million gallons per day | $4.381\text{x}10^{1}$ | cubic decimeters per second (dm$^{3}$/s) |
| | $4.381\text{x}10^{-2}$ | cubic meters per second (m$^{3}$/s) |
| | *Mass* | |
| tons (short) | $9.072\text{x}10^{-1}$ | megagrams (Mg) or metric tons |

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